

## **Nebraska Children's Commission – Psychotropic Medication Committee**

Third Meeting

November 6, 2012

2:00-4:00PM

BryanLGH West – West Nursing System Classroom  
2300 South 16th, Lincoln, NE

### **Call to Order**

Jen Nelson called the meeting to order at 2:00pm and noted that the Open Meetings Act information was posted in the back of the room as required by state law.

### **Roll Call**

Subcommittee Members present: Jennifer Nelson, Pam Allen, Beth Baxter, Amanda Blankenship, Sara Goscha, Norman Langemach, Carla Lasley, Kayla Pope, Gary Rihanek, Blaine Shaffer, Vicky Weisz, and Gregg Wright.

Subcommittee Members absent: Candy Kennedy-Goergen and Kristi Weber.

### **Approval of Agenda**

A motion was made by Beth Baxter to approve the agenda with a change of moving item VI before item V in the agenda. The motion was seconded by Gary Rihancek. Voting yes: Jennifer Nelson, Pam Allen, Beth Baxter, Amanda Blankenship, Norman Langemach, Carla Lasley, Gary Rihanek, Blaine Shaffer, Vicky Weisz, and Gregg Wright. Candy Kennedy-Goergen, Sara Goscha, Kayla Pope, and Kristi Weber were absent. Motion carried.

### **Approval of October 10, 2012, Minutes**

A motion was made by Beth Baxter to approve the minutes of the October 10, 2012, meeting, seconded by Pam Allen. Voting yes: Jennifer Nelson, Pam Allen, Beth Baxter, Amanda Blankenship, Norman Langemach, Carla Lasley, Gary Rihanek, Blaine Shaffer, Vicky Weisz, and Gregg Wright. Norman Langemach and Gregg Wright abstained. Candy Kennedy-Goergen, Sara Goscha, Kayla Pope, and Kristi Weber were absent. Motion carried.

### **American Academy of Child and Adolescent Psychiatry (AACAP) Guidelines**

The committee reviewed the AACAP guidelines for psychotropic medication use in children and youth who are wards of the State. Beth Baxter provided a copy of comments and edits that she was suggesting to the guidelines. The committee agreed to use that version of the guidelines for

discussion purposes. The committee discussed the need to add a reference in the background information to trauma and to the lack of consistency in the monitoring of medications across placements. The committee also discussed the processes that could be used to monitor medications especially for those children under the age of 5.

The committee discussed adding clarification to the basic principles that would require appropriate education for youth on medications that they are taking to aid in effective medication management. The committee then discussed the wide range of training that was needed for children, youth, families, caregivers, and for the workforce.

The committee then discussed oversight procedures and the use of advisory committees to oversee a medication formulary and provide medication monitoring guidelines. The committee also decided to add information that DHHS and the Administrative Office of the Courts along with other system stakeholders should work together on guidelines and protocols that address the principles and recommendations for monitoring the use of psychotropic medications.

Gregg Wright then moved to approve the guidelines with Beth Baxter's revisions and the committee's friendly amendments. The motion was seconded by Jen Nelson. Voting yes: Jennifer Nelson, Pam Allen, Beth Baxter, Amanda Blankenship, Norman Langemach, Carla Lasley, Gary Rihanek, Blaine Shaffer, and Gregg Wright. Candy Kennedy-Goergen, Kristi Weber, and Vicky Weisz were absent. Motion carried.

#### **DHHS Provide Data and CFS Training Team**

Paulette Wathen and Mary Osborne provide the committee with an update on CFS training. Information was also provided on Nebraska Medicaid prior authorization process.

#### **New Business**

#### **Next Meeting Date**

None scheduled at this time.

#### **Adjourn**

A motion was made by Kayla Pope to adjourn the meeting, seconded by Carla Lasley. The meeting adjourned at 4:12pm.

## **Research Proposal**

**Hailey Kimball, University of Nebraska Medical Center- College of Nursing**

### **Specific Aims**

#### **Introduction to the topic:**

The children and adolescents apart of Nebraska's Medicaid offer special challenges to the practitioner. In addition, there are many children who are entering and leaving the system, through temporary orders, hour holds, commitment for the purpose of placement, or by turning age 19 and reaching the age of consent. Collectively with this issue, these children develop into an extremely vulnerable population. Many of these children rotate between foster homes, group homes, residential treatment centers, and hospitals. Not only do children and adolescents getting state assistance present with psychiatric diagnostic issues, but also the lack of medical history may not be available to clarify medical and behavioral health issues, and without a consistent primary provider managing their care. As a result, many states are coming up with guidelines for use of psychotropic medicines.

In 2010, Americans spent more than \$16 billion on antipsychotics, \$11 billion on antidepressants and \$7 billion for drugs to treat attention-deficit hyperactivity disorder (ADHD). The rapid growth of all three classes of drugs has alarmed mental health professionals (Smith, 2012). Given the magnitude of psychotropic drug costs and burdens, many states are coming up with guidelines for use of psychotropic medicines in children and adolescents. Along with the alarming trends in psychotropic medication use in children and youth, examples of these trends include: lack of evidence-base for pediatric psychopharmacology; increased awareness of side effects of SSRIs; medication use linked to increased susceptibility to diabetes, metabolic syndrome and obesity; increase in use of second generation antipsychotic for aggression when new studies show first generation antipsychotic for psychosis may be more effective; and the extreme lack of psycho therapeutic treatment options leading to an over-relied upon mono-therapy of medications. It is time to examine prescribing practices for Nebraska children who are Medicaid beneficiaries. States like Connecticut, Florida, Illinois, New Jersey, Tennessee, and Texas have already published their own guidelines. **{INSERT OUTCOMES, POSITIVE RESULTS}**.

Nebraska is in need of their own guidelines and protocols based on clinical evidence, clinical judgment, and research on the state's prescribing practices, psycho and behavioral therapy use, and current trends of this population.

#### **Research Topic:**

Psychotropic medication and psycho and behavioral therapy use by children and adolescents enrolled in Nebraska Medicaid.

#### **Research Problem (Justification):**

Psychotropic is defined as affecting the mind (Varcarolis, 2006) therefore; psychotropic medications are drugs that have an effect on psychic function, behavior, or experience (Varcarolis, 2010). In 2006, the American Psychological Association (APA) summarized estimates for the morbidity associated with child and adolescent mental disorders with prevalence rates for childhood disorders ranging from 17% to 22% and where some 15%

have significant functional impairment. In light of this data, increases in the number and percentage of children being treated with psychotropic drugs has been observed with this Medicaid population (Magellan, 2013). Further, many of those prescribed medications were based on weak scientific evidence. Of bigger concern, are the effects of prescribing practices to these children in rural areas who experience additional disparities. The state of Nebraska needs to identify their prescribing patterns (first line, second line treatments) for children and adolescents and for which diagnosis, prescribing patterns by prescriber: general practitioner vs. psychiatrist, and explore the rural vs. urban environment comparison (specifically, due to the lack of psychiatric resources outside of Omaha/ Lincoln). Limited resources may create a dependence on medications as first-line treatments (via mono-therapy), where as national best practice guidelines express a more collaborative approach using pharmacological treatments in conjunction with psycho and behavioral therapies.

### **Research Purpose:**

The purpose of this research is to examine how psychotropic medication is being used in the treatment of children and adolescents with mental and behavioral issues in Nebraska. More specifically, we want to assess the rate of medications being prescribed to children and adolescents across rural and urban environments of care and understand how that relates to different age groups (0-5, 6-12, 13-18).

- **Independent Variables:** Rural and urban environments, age groups (0-5, 6-12, 13-18), gender, prescriber specialty (i.e. general physicians, pediatricians, nurse practitioners, psychiatric nurse practitioner, psychiatrists, etc.), psycho and behavioral therapies (i.e. psychotherapy, behavioral therapy, interpersonal therapy, dialectical behavior therapy, cognitive behavioral therapy, etc.), and years in Medicaid system.
- **Dependent Variables:** Prescriptions, expenditures, prescriptions per recipient, expenditures per recipient
- **Population:** Children & Adolescents (0-18) receiving Medicaid
- **Setting:** Nebraska, USA
- **Measurable:** Data included in Nebraska Medicaid Database
- **Audience:** This research will provide new evidence on status of Nebraska in prescribing psychotropic drugs to children and adolescents.

### **Research Questions:**

1. What psychotropic medications are being prescribed to children and adolescents who are Medicaid recipients in Nebraska and for what indication (i.e. diagnosis)?
2. At what rate are the medications being prescribed to children and adolescents who are Medicaid recipients in Nebraska within the last 10 years (2004-2014)?
3. Does the environment (rural vs. urban comparison) affect the amount of prescriptions prescribed (due to the differences in availability of resources)?

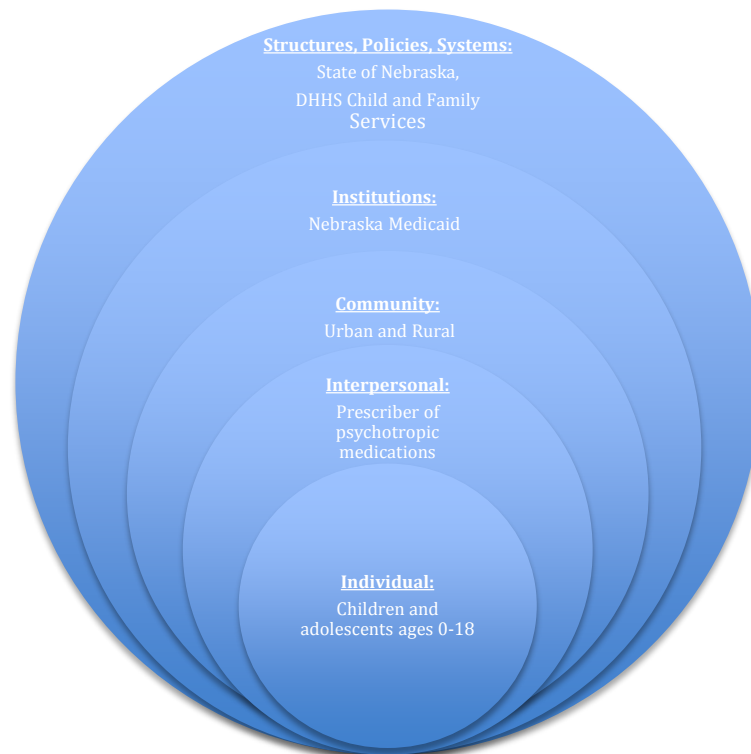
4. Does age group affect the number of prescriptions prescribed (age groups 0-5, 6-12, 13-18)?
5. What percentage of children and adolescents are receiving various types of psycho and behavioral therapies in conjunction with medications?

### **Background/ Significance**

#### **Significance:**

#### **Brief literature review:**

#### **Conceptual framework:**



Levels of influence using Urie Bronfenbrenner's Social Ecological Model.

## Research Design & Methods

### Research design:

Quantitative analysis will be performed on Medicaid data of children and adolescents who are prescribed psychotropic medications and recipients of Medicaid in Nebraska. Psychotropic medication treatment data will be identified by pattern, frequency, medication class, subclass, and drug entity and analyzed in relation to age group (0-5, 6-12, 13-18); gender; psychiatric diagnosis; prescriber specialty, environmental location (urban or rural setting) and the use of psycho and behavioral therapies.

### Sample, inclusion and exclusion criteria and selection methods:

- **Age:** 0-18
- **Medication:** Psychotropic drugs (Stimulants, Antidepressants, Antipsychotics, Anxiolytics/ Sedatives/ Hypnotics, and Mood stabilizers)
- **Diagnosis:** Anxiety D/O, Major Depression D/O, Bipolar D/O, ADHD, Conduct D/O, Personality D/O, Schizophrenic D/O, etc.
- **Psycho and Behavioral therapies:** Interpersonal therapy, Dialectical behavior therapy, Cognitive behavioral therapy, etc.
- **Prescriber:** Psychiatrist, psychiatric nurse practitioner, pediatrician, general physician, nurse practitioner, etc.
- **Environment:** Urban (Lincoln/Omaha) or Rural
- **Time Frame:** 2004-2014 (per year)

**Size of sample:** At the time of the IRB approval, Nebraska Medicaid database will be screened to find children and adolescents prescribed psychotropic medications between 2004-2014. At this time, the number of records is unknown.

### Describe all the major variables in the study and how they are measured (the operational definitions).

#### Independent Variables:

**Urban:** The Census Bureau identifies two types of urban areas: Urbanized Areas (UAs) of 50,000 or more people; Urban Clusters (UCs) of at least 2,500 and less than 50,000 people (U.S. Census Bureau, 2013).

**Rural:** The Census Bureau identifies rural as encompassing all population, housing, and territory not included within an urban area (U.S. Census Bureau, 2013).

**Prescriber** is a person who writes an order for a drug, treatment, or procedure and recommends or encourages a course of action (Mosby's, 2009).

**Nebraska Medicaid** is a federal/state partnership that was authorized in the Social Security Act in 1965. The federal Centers for Medicare and Medicaid Services (CMS) set minimum requirements, while each state selects the populations and services they will cover. Both the federal and state governments share the cost. In Nebraska, 60% federal and 40% state. Medicaid, in particular,

pays for health care services for certain low-income people who meet specific eligibility requirements. The Nebraska Division of Medicaid and Long-Term Care (MLTC), under the Nebraska Department of Health and Human Services (DHHS), is the designated Single State Agency tasked with administration of the Nebraska Medicaid program. The groups covered by Nebraska Medicaid include pregnant women, children and their families, and individuals who are aged, blind, or disabled (Nebraska DHHS, 2014).

### **Psycho and Behavioral therapies:**

**Therapy** is a therapeutic interaction or treatment contracted between a trained professional and a client, patient, family, couple, or group (Merriam Webster).

**Psychotherapy** is the systematic application, by a trained and experienced professional therapist, of techniques derived from psychological principles, for the purpose of helping psychologically troubled people; includes both insight-oriented and action-oriented therapies (Sue, Sue, & Sue, 2006).

**Behavioral therapy** is a treatment that helps change potentially self-destructing behaviors. It is also called behavioral modification or cognitive behavioral therapy. There are four main elements to this therapy: 1. There is a collaborative relationship between patient and therapist, 2. Psychological distress is largely a function of disturbances in cognitive processes, 3. Focus is on changing cognitions to produce desired changes in affect and behavior, and 4. It is an educational treatment focusing on specific and structured target problems (Corey, 2005).

### **Dependent Variables:**

**Prescriptions:** An order, especially by a physician, for the preparation and administration of a medicine, therapeutic regimen, assistive or corrective device, or other treatment (Merriam Webster).

**Expenditures:** An amount of money that is spent on something (Merriam Webster).

### **Step-by-step outline of the protocol/procedures:**

#### **Description of the data analysis plan for each aim (research question or hypothesis):**

1. What medications and for what indications (i.e., diagnoses). Medications will be grouped into five classes (stimulants, antidepressants, antipsychotics, mood stabilizers, and adrenergic agents), and diagnoses will be grouped into general categories based on Ns (e.g., mood, behavioral, anxiety, psychotic, adjustment). This is primarily a descriptive analysis, because the number of psychotropic medications used and potential diagnoses is too large to allow a detailed analysis. Chi-square analysis will test for general patterns, and the extent to which each medication class is used for approved (for diagnostic category) versus not approved (off-label) purposes.

2. Rate over last 10 years. Hierarchical Linear Modeling (HLM) will be used to compare changes over time for the different medication classes, and the extent to which these changes can be attributed to patient needs (e.g., diagnosis) and attributes (e.g., age, sex, race).
3. Rural v. urban differences in psychotropic medication rates. Multivariate Analysis of Variance (MANOVA) will be used to test for differences in the use of each of the 5 psychotropic medications classes for youth living in rural versus urban settings by prescribing agent (psychiatrist versus physician).
4. Age group differences (0-5, 6-12, 13-18) in medication rates. MANOVA will be used to test for differences in the use of each of the 5 psychotropic medications classes for youth of different ages (specifically 0-5, 6-12, 13 and older) by prescribing agent (psychiatrist versus physician).
5. Relationship between psychotropic medication use and psycho-behavioral therapy use. Logistic regression will be used to examine the relationship between concurrent psycho-behavioral therapy (Y/N) and each of the 5 medication classes and subject attributes.



## **Project Management:**

**Hailey Kimball (PI)**, University of Nebraska Medical Center- College of Nursing, is responsible for answering the following research questions:

- What psychotropic medications are being prescribed to children and adolescents who are Medicaid recipients in Nebraska and for what indication (i.e. diagnosis)?
- At what rate are the medications being prescribed to children and adolescents who are Medicaid recipients in Nebraska within the last 10 years (2004-2014)?
- Does age group affect the number of prescriptions prescribed (age groups 0-5, 6-12, 13-18)?

**Dr. Jonathan Huefner (SI)**, Research Scientist, Boystown National Research Hospital is responsible for answering the following research questions:

- Does the environment (rural vs. urban comparison) affect the amount of prescriptions prescribed (due to the differences in availability of resources)?
- Other: Prescribing practices:
  - Prescribing agent (i.e. psychiatrist, psychiatric nurse practitioner, pediatrician, general physician, nurse practitioner, etc.)
  - Gender differences (male vs. female)
  - Race differences (i.e. African-American (Black), Asian, Caucasian (White), Hispanic, etc.)
  - Psychotropic medications being prescribed (approved vs. off-label)

**Mary “Margo” Lormier (SI)**, University of Nebraska at Omaha- Masters in Counseling, is responsible for answering the following research questions:

- What percentage of children and adolescents are receiving various types of psycho and behavioral therapies in conjunction with psychotropic medications?
- Other: Alternative mental health therapies for children and adolescents receiving psychotropic drugs.

## References

- Corey, G. (2005). *Theory and practice of counseling & psychotherapy, 7<sup>th</sup> Edition*. Belmont, CA: Brooks/Cole – Thomson Learning.
- Expenditures (n.d.). In *Merriam Webster Online*, Retrieved April 4th, 2014, from <http://www.merriam-webster.com>
- Magellan (2013). Appropriate use of psychotropic drugs in children and adolescents: A clinical monograph. Magellan Health Services, Inc., 1-27.
- Mosby's medical dictionary (8th ed.). (2009). St. Louis, Missouri: Elsevier
- Nebraska Department of Health and Human Services (2014). Medicaid reform definitions: Lincoln, NE. Retrieved March 29th, 2013, from [http://dhhs.ne.gov/medicaid/Pages/med\\_reform\\_definition.aspx](http://dhhs.ne.gov/medicaid/Pages/med_reform_definition.aspx)
- Prescriptions (n.d.). In *Merriam Webster Online*, Retrieved April 4th, 2014, from <http://www.merriam-webster.com>
- Smith, B. (2012). Inappropriate prescribing. *American psychological association, 43(6)*, 36.
- Sue, D., Sue, D. W., & Sue, S. (2006). *Understanding abnormal behavior, 8<sup>th</sup> Edition*. Boston, MA: Houghton Mifflin Company.
- Therapy (n.d.). In *Merriam Webster Online*, Retrieved April 4th, 2014, from <http://www.merriam-webster.com>
- U.S. Census Bureau (2013). *Urban & rural classification: Allegany County, N.Y.* Retrieved April 4th, 2013, from <http://www.census.gov/geo/reference/urban-rural.html>
- Varcarolis, E. M., Carson, V. B., & Shoemaker, N. C. (2006). *Foundations of psychiatric mental health nursing: A clinical approach, 5<sup>th</sup> Edition*. St. Louis, Missouri: Elsevier
- Varcarolis, E. M. & Halter, M. J. (2010). *Foundation of psychiatric mental health nursing: A Clinical approach, 6<sup>th</sup> Edition*. St. Louis, Missouri: Elsevier.
- Whitaker, R. (2010). Anatomy of an epidemic: magic bullets, psychiatric drugs, and astonishing rise of mental illness in America. New York: Crown Publishing Group a division of Random House, Inc.
- Zito, J., Safer, D. J., Valluri, S., Gardner, J. F., Korelitz, J. J., & Mattison, D. R. (2007). Psychotherapeutic medication prevalence in Medicaid-insured preschoolers. *Journal of child and adolescent psychopharmacology, 17(2)*, 195-203.