Poster #3

Integrated Mental Health Care in an Outpatient Pediatric Clinic

Laura Willing, M.D. [1]*, Brittany Rodgers, M.D.* [1]*, Echo Meyer, Ph.D.* [2]*, Amy Ursano, M.D.* [1]*, Karen Poulos, M.D.* [1]

[1]*University of North Carolina at Chapel Hill, School of Medicine, Department of Psychiatry*
2 University of North Carolina at Chapel Hill, School of Medicine, Department of Psychiatry and Pediatrics

All five investigators are employed by UNC and have no conflicts to disclose. This project is not being funded by grants or private funding.

Background

- 12% of children and adolescents are estimated to experience functionally impairing psychiatric disorders, which is concerning given the nationally acknowledged shortage of child and adolescent psychiatrists.[1]
- Given the limited number of psychiatric providers, primary care providers (i.e., pediatricians) frequently encounter these children and adolescents and provide care for their mental health needs. While pediatricians play a key role in the mental health care of children and adolescents, they may feel unprepared to do so.[2]
- A European study of German primary care providers revealed significant differences in these providers' sense of competency in treating various psychiatric disorders.[3]
- It is described and understood in research and clinical experience that the emergency department is increasingly utilized for pediatric mental health concerns, many of which are non-emergent. Additionally, this statistic of emergency department visits for psychiatric disorders is increasing over time and may be understood related to limited access to mental health care.[4]
- This increasing need for mental health care treatment with limited child and adolescent psychiatrist availability is an additional indication for our study of integrated care model within a pediatric clinic.

Objectives

1) Evaluate pediatric residents' knowledge and comfort with identifying and treating psychiatric disorders in children and adolescents, which we would evaluate prior to the intervention of providing consultation and education in this area.
2) Assess pediatric residents' awareness and comfort with identifying and treating psychiatric disorders in pediatric population
3) Monitor numbers and outcomes of patients cared for through this integrated care project.
4) Improve access to mental health care for the pediatric population served by UNC General Pediatrics.

Methods

- Psychiatry will be available in the UNC General Pediatrics outpatient clinic for an 8 month period.
- The UNC Pediatrics Clinic is an outpatient clinic associated with a large teaching hospital that serves a culturally and socioeconomically diverse population.
- The intervention will involve "curbside" recommendations regarding diagnosis and treatment for patients with psychiatric symptoms with a focus on anxiety, depression, ADHD, and eating disorders
- All patients that the residents in this pediatric clinic refer to this program will be tracked in a de-identified database and monitored for
  - Psychiatric diagnoses
  - Results of screening tools (Pediatric symptoms checklist, Vanderbilt ADHD rating scales, SCARED, PHQ-9, EAT-26)
  - Improvement relative to last visit per appropriate screening measure
  - Mental health referral
  - Psychiatric Medications
  - ED visits for mental health chief complaints
- As a control group, patients with psychiatric symptoms seen in the same morning clinic from 3 months prior to the intervention will be monitored via chart review for the same outcome measures as above.
- Pediatric residents and attending physicians from this clinic will complete surveys before and after the 8 month intervention to quantify their level of comfort with diagnosing and treating a variety of psychiatric illnesses in the pediatric population (Figure 1).
- Sample of pediatric providers includes residents and attending physicians at UNC Chapel Hill Pediatric outpatient clinic N=37. PGY-1 makes up 27% of respondents; PGY-2 30%; PGY-3 24%; fellows 3%; and attending physicians make up 16% of respondents (Figure 2).

Findings

- A majority (86%) of respondents believe diagnosing and treating psychiatric illness is relevant to their clinical practice (Figure 4).
- Prior to intervention, pediatric providers feel the least comfortable treating anxiety disorders in a pediatric populations, with 73% of respondents reporting not feeling comfortable treating anxiety in their patients (Figure 6).

Future Directions

- Over the next 8 months, the data collected on patient diagnoses, screenings, outcomes, medications, mental health referrals and ED visits will be compared to the control group data. These results will indicate the effectiveness of the intervention in improving the patient's access to mental health care, patient outcomes, and the need for referrals to other specialties (psychiatry, therapies, etc.).
- Once the intervention has been completed, the respondents answers to the surveys before and after the intervention will be compared. These results will illuminate beliefs, attitudes and comfort level in pediatric providers with respect to diagnosing and treating a variety of pediatric psychiatric illnesses.
- Given the reported level of belief of the importance of understanding diagnosis and treatment of psychiatry diagnoses in a general pediatrics clinic and the clear desire for more knowledge and comfort, the benefits of this type of level of intervention are believed to be of critical interest to the current models of care in pediatrics.
- The findings of this pilot project are important as they pertain to key training factors in a pediatric residency program and may be replicable at other institutions.

References

[1] Kim, Wun Jung WJ. *Academic Psychiatry: Child and Adolescent Psychiatry Workforce: A Critical Shortage and National Challenge.* 27 Vol. American Psychiatric Publishing, Inc., 2003. Web. 1 Sep. 2015.
[2] Holt, W. "The Massachusetts Child Psychiatry Access Project: Supporting Mental Health Treatment in Primary Care, A Case Study by the Commonwealth Fund", March 2010.
[3] Lempp, Thomas T. *European Child & Adolescent Psychiatry: Child and Adolescent Psychiatry: Which Knowledge and Skills do Primary Care Physicians Need to have? A Survey in General Practitioners and Paediatricians.* Hogrefe & Huber Publishers, 08/2015. Web. 1 Sep. 2015.
[4] Lynch, Sean S. *Pediatric Emergency Care: Child Mental Health Services in the Emergency Department: Disparities in Access.* 31 Vol. Lippincott Williams and Wilkins, 07/2015. Web. 1 Sep. 2015.

Figure 1. Pre and Post-Test Survey for Pediatric Providers: an Eight Point Likert Scale

Level of Training: PGY1 PGY2 PGY3 Fellow Attending

I am comfortable with evaluating patients for psychiatric problems, such as depression, anxiety, anorexia, and ADHD.
0 1 2 3 4 5 6 7

Diagnosing and treating psychiatric problems is relevant to my clinical practice.
0 1 2 3 4 5 6 7

I am knowledgeable about depression in a pediatric population.
0 1 2 3 4 5 6 7

I feel comfortable diagnosing depression in my patients.
0 1 2 3 4 5 6 7

I feel comfortable treating depression in my patients.
0 1 2 3 4 5 6 7

I am knowledgeable about anxiety in a pediatric population.
0 1 2 3 4 5 6 7

I feel comfortable diagnosing anxiety disorders in my patients.
0 1 2 3 4 5 6 7

I feel comfortable treating anxiety disorders in my patients.
0 1 2 3 4 5 6 7

I am knowledgeable about ADHD in a pediatric population.
0 1 2 3 4 5 6 7

I feel comfortable diagnosing ADHD in my patients.
0 1 2 3 4 5 6 7

I feel comfortable treating ADHD in my patients.
0 1 2 3 4 5 6 7

I have had previous exposure to psychiatric illnesses in a pediatric population.
0 1 2 3 4 5 6 7

I know when and how to access support services (case management, therapy, etc).
0 1 2 3 4 5 6 7

I know when and how to refer to psychiatry.
0 1 2 3 4 5 6 7

Figure 2. Level of Training of Survey Respondents

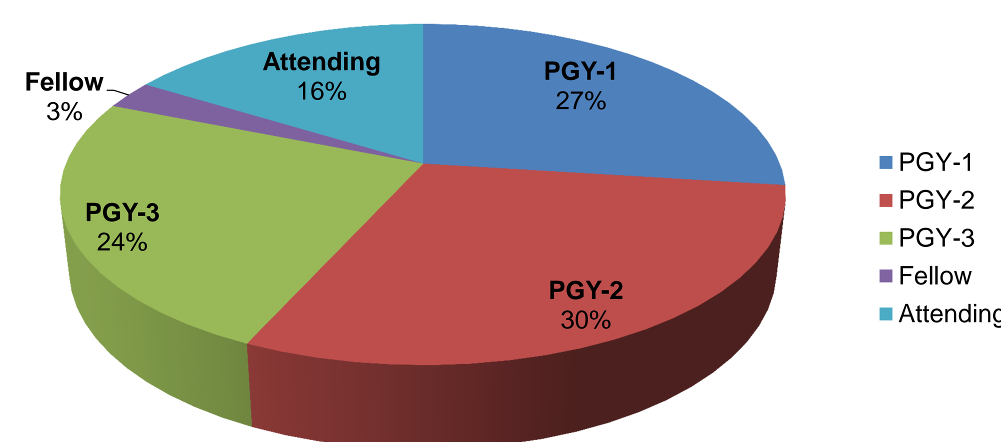

Figure 3. I am comfortable with evaluating patients for psychiatric problems, such as depression, anxiety, anorexia, and ADHD.

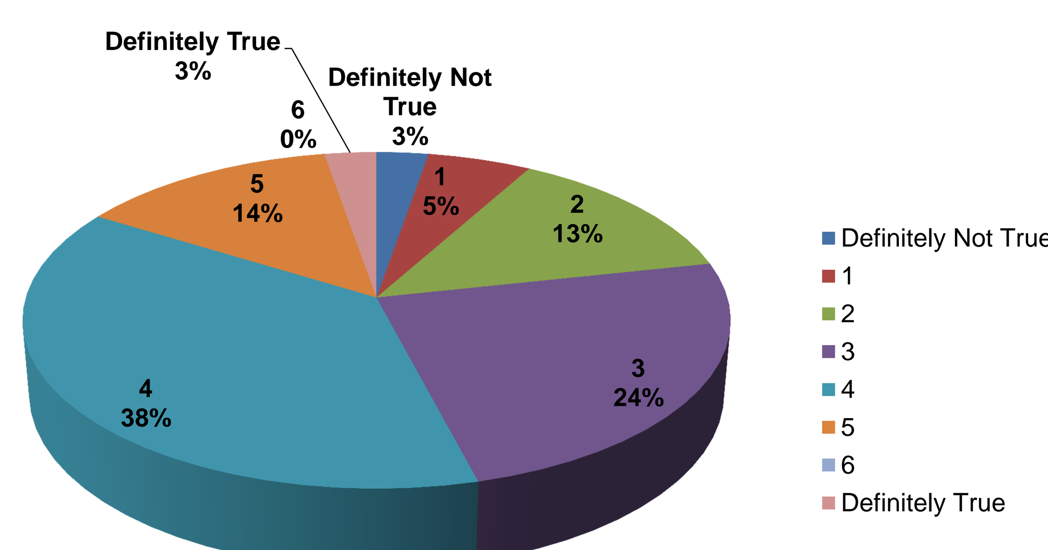

Figure 4. Diagnosing and treating psychiatric problems is relevant to my clinical practice

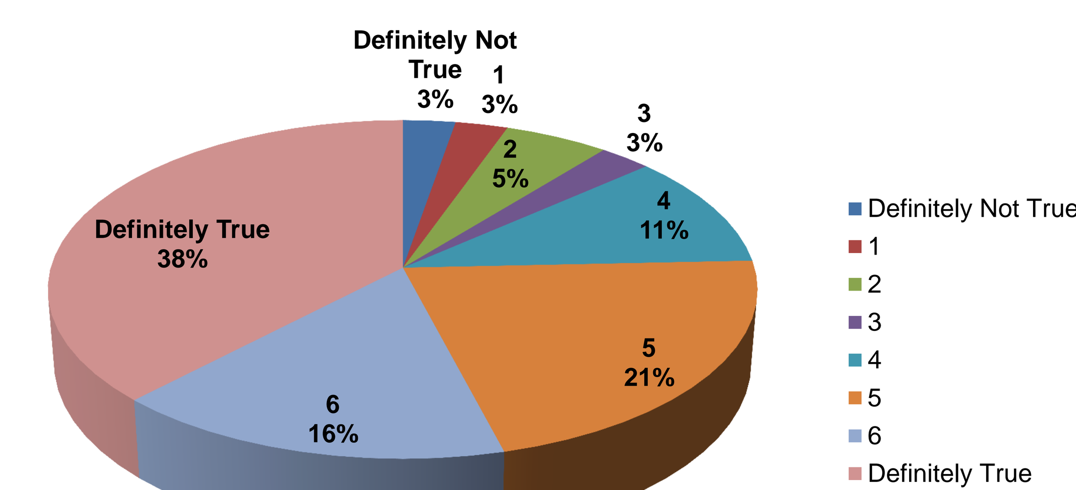

Figure 5. I feel comfortable treating depression in my patients.

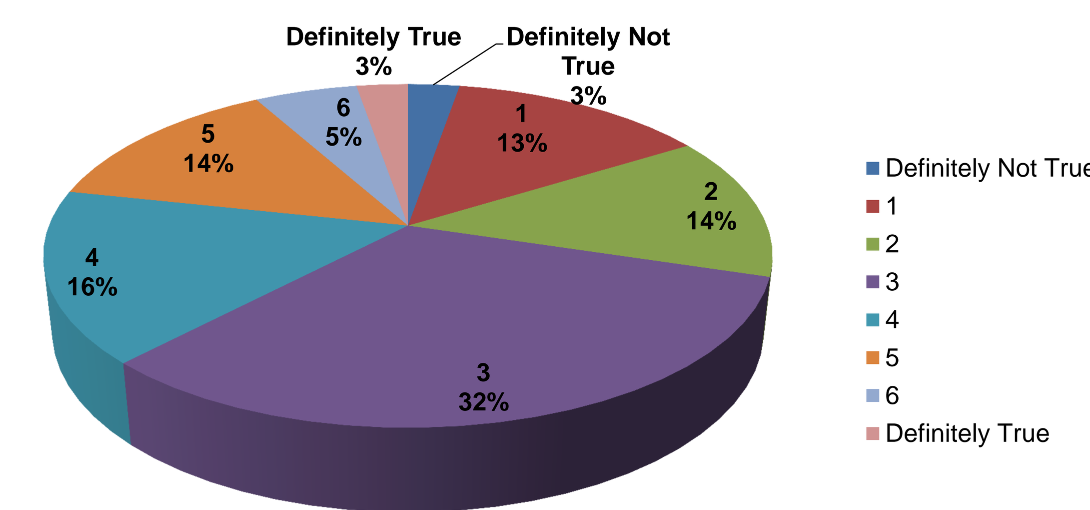

Figure 6. I feel comfortable treating anxiety in my patients.

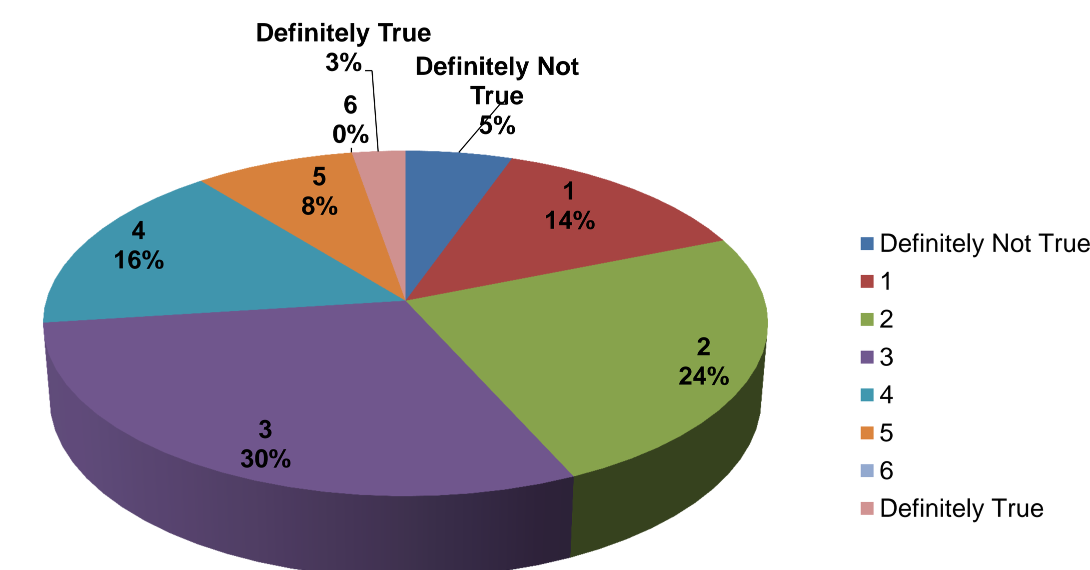

Figure 7. I know when and how to access support services (case management, therapy, etc.)