Psychiatric Hospitalizations Among Medicaid-Insured Youth

Michael T. Abrams, MPH[1]*, Julie M. Zito, PhD[2], Mehmet Burcu, MS[2], Lauren Vanderwerker, PhD[1], Jayne Miller, BS[1]

[1]The Hilltop Institute at UMBC; [2]University of Maryland, Baltimore, Pharmaceutical Health Services Research Department

The Hilltop Institute

analysis to advance the health of vulnerable populations

Introduction

- Mental health morbidity is especially high in Medicaid-insured youth, particularly among foster care youth and youth with disabilities.[1,2]
- While recent research in Medicaid showed that psychotropic medication use (e.g., antipsychotics[3]) is substantially greater in foster care youth than in youth eligible for Medicaid due to family income, less attention has been focused on acute psychiatric hospitalizations[4,5] according to Medicaid eligibility category.

Objectives

- To assess annual prevalence of psychiatric hospitalizations among continuously enrolled youth in a state Medicaid program according to Medicaid-eligibility category
- To assess number of psychiatric hospitalizations according to Medicaid-eligibility category
- To assess clinician-reported admission (primary) diagnoses in psychiatric hospitalizations

Methods

- Computerized administrative claims data were organized for youth (2-19 years) with ≥10 months of enrollment in a mid-Atlantic state Medicaid program in fiscal year 2013 (July 2012-June 2013)
- Main outcome measure was psychiatric hospitalizations, which were assessed from inpatient claim records
- Main independent variable was Medicaid-eligibility category which included:

1. Foster care youth
2. Youth with disabilities (Supplemental Security Income [SSI])
3. Youth with family income below the federal poverty level (FPL), Temporary Assistance for Needy Families (TANF)
4. Youth with family income up to 300% of FPL, Children's Health Insurance Program (CHIP)

- Other covariates included age group (2-9, 10-14, 15-19 years), gender, race/ethnicity (White, African American, and other), and a flag for the presence or absence of non-emergency mental health or somatic outpatient visits.
- Quantitative analyses

A. Bivariate analyses were conducted to assess population characteristics according to Medicaid-eligibility category

B. Multivariable logistic regression models were conducted separately for each age group to estimate age-group specific odds of psychiatric inpatient admission according to Medicaid-eligibility category, adjusting for study covariates

C. Frequencies of the primary diagnosis were considered in the aggregate (i.e., across all age groups and eligibility categories) and by eligibility category.

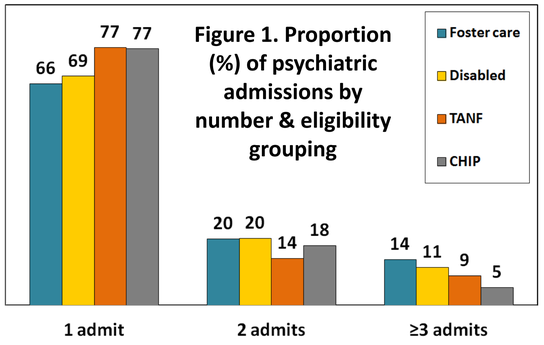
Results

- Population characteristics: among 399,845 continuously enrolled (≥10 months) youth in fiscal year 2013, 2.6% were in foster care, 4.0% were in SSI, 62.2% were in TANF, 31.1% were in CHIP; 73.7% were non-White; and 52.7% were <10 years of age (data not shown)

Table 1. Psychiatric inpatient admission counts, prevalence (%), and adjusted-odds ratios

Eligibility category	2-9 year olds n=210,610	10-14 year olds n=106,902	15-19 year olds n=82,333
	Count (prevalence in %)		
Foster care	40 (1.24)	154 (4.91)	258 (6.24)
SSI (Disabled)	95 (1.78)	217 (3.90)	212 (4.16)
TANF	170 (0.13)	456 (0.71)	596 (1.19)
CHIP	25 (0.04)	169 (0.50)	235 (1.02)
	Adjusted Odds Ratio (95% CI)		
TANF & CHIP	Reference	Reference	Reference
Foster Care	4.00 (2.82-5.66)	3.98 (3.29-4.78)	2.97 (2.55-3.45)
SSI (Disabled)	3.38 (2.61-4.36)	2.26 (1.92-2.66)	1.48 (1.26-1.73)

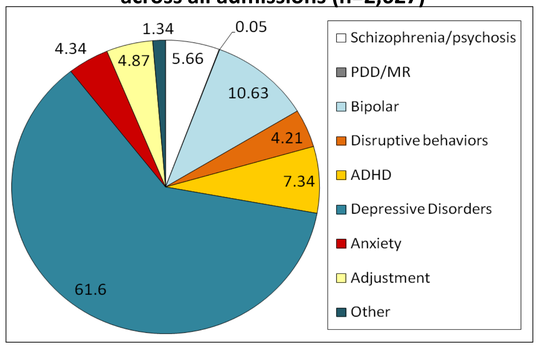
- **Table 1** shows that across all age groupings foster care and SSI have higher adjusted-odds of hospitalizations versus the income eligible groupings (TANF & CHIP).



- **Figure 1** shows that foster care and disabled subgroups with psychiatric admissions are more likely to have repeat (>1) admissions in the year compared to income eligible subgroups.

- **Figure 2** shows that the top three admitting psychiatric diagnoses were:
  i. Depressive disorders (61.6%)
  ii. Bipolar disorder (10.63%)
  iii. Attention-deficit/ hyperactivity disorder (ADHD) (7.34%)
- When examined by Medicaid eligibility category, proportional distribution of psychiatric diagnoses was mostly comparable (data not shown)

Figure 2. Proportion (%) of primary diagnosis across all admissions (n=2,627)



Conclusions

- These findings in a mid-Atlantic state Medicaid program highlight a relatively high use of inpatient psychiatric hospitalizations annually among foster care youth regardless of age group, even exceeding that of youth with disabilities (SSI) and especially regarding multiple admissions. They further describe the psychiatric diagnoses that result in inpatient admission for Medicaid youth.

Policy Implications/Future Directions

- Two or more inpatient psychiatric inpatient admissions in a single year warrants follow-up to better understand the challenges in coordination of care, particularly among foster care youth.
- Specific diagnoses tied to inpatient admissions also requires further exploration.[1]
- Additional attention to the continuity and quality of therapeutic strategies (e.g., psychotropic medication or other mental health service) exposure prior to, during and after inpatient psychiatric hospitalization is needed.[3,5]

References/Acknowledgements

1. Persi & Sisson (2008): *Child Welfare*, 87(4): 79.
2. U.S. Government Accountability Office (2012), Report #: GAO-13-15.
3. Zito et al. (2013): *Psychiatr Serv*, 64(3):223-9.
4. Bryson & Akin (2015): *Adm Policy Ment Health*, 42(2), 197.
5. Torio et al. (2015): Acad Pediatr, 15(1): 19-35.

We thank the Maryland Department of Health and Mental Hygiene for data use permissions and the Delmarva Foundation for their financial support.

UMBC
AN HONORS UNIVERSITY IN MARYLAND

#582: AcademyHealth Research Meeting, Minneapolis, MN, June 15, 2015

* Correspondence to: mabrams@hilltop.umbc.edu