Characteristics of Providers Using a Child Psychiatry Access Program in Maryland

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Maryland-Behavioral Health Integration in Pediatric Primary Care (MD-BHIPP)

Background

Despite a significant increase in outpatient visits for diagnosis and treatment of mental health disorders among youth (Olfson, 2014),there is a growing gap between the need for and availability of pediatric mental health services(MHS) (Thomas, 2016). Child Psychiatry Access Programs (CPAP), like the Maryland Behavioral Health Integration in Pediatric Primary Care(MD-BHIPP) program have shown promise in increasing access to MHS (Sarvet, 2010, Harrison, 2016).

Purpose

The purpose of this study is to describe the types of primary care clinicians(PCCs) that call BHIPP and to examine patterns of their use of BHIPP services.

Methods

Data on N= 678 PCCs who called BHIPP between 2012-2019 were examined. The following measures were used:

- PCC demographics (i.e., gender, race/ethnicity)
- PCC type (e.g., MD, NP, etc.)
- PCC primary specialty
- Location of primary care practice
- Reason for calling BHIPP (e.g., clinical consultation)

Descriptive statistics were used to compare call frequency by PCC characteristics. Longitudinal latent class analysis using call reason across a PCCs first 5 calls as class indicators was conducted to identify subgroups of PCC's distinguished by call reason. Logistic regression was used to examine class differences on PCC characteristics.

Results

Table 1. Characteristics of PCCs Who Called BHIPP by Call Frequency

Provider Characteristics (N=678)	Low/Medium Volume Callers (N=506)	High Volume Callers (N=172)	Chi Square
All Providers Calling BHIPP	74.6%	25.4%	
Average years in practice	13.76(10.85)	13.73(10.31)	
Provider Type			15.41*
MD/DO	322(63.6%)	135(78.5%)	
NP	122(24.1%)	30(17.4%)	
PA	16(3.2%)	1(0.6%)	
Other (RN, SW, PhD)	46(9.1%)	6(3.5%)	
Provider Specialty			19.25**
Pediatrician	364(71.9%)	152(88.9%)	
Family Practice	62(12.3%)	9(5.3%)	
Other (e.g., Internal Medicine)	76(15.0%)	10(5.8%)	
Unknown	4(0.8%)	1(0.6%)	
Urbanicity of Practice			0.92
Urban/suburban	444(88.1%)	153(89.0%)	
Rural/semi-rural	60(11.9%)	19(11.0%)	
Insurance Accepted			
Uninsured	143(28.3%)	70(40.7%)	9.22*
Sliding scale	67(13.2%)	18(10.5%)	0.90
Public	232(45.8%)	120(69.8%)	29.42**
Private	236(46.6%)	128(74.4%)	39.84**
Provider Sex			32.42**
Male	56(11.1%)	24(14.0%)	
Female	205(40.5%)	107(62.2%)	
Unknown	245(48.4%)	41(23.8%)	
Provider race/ethnicity			38.14**
African American	28(5.5%)	13(7.6%)	
Asian	30(5.9%)	19(11.0%)	
White	151(29.8%)	84(48.8%)	
Other	17(3.4%)	7(4.1%)	
Unknown	280(55.3%)	49(28.5%)	

Notes. Low/Medium volume callers = 1-4 calls, High volume callers>=5 calls. *p<.05; **p<.001

Table 2. Comparisons of Call Reason by Type of Caller

	Low/Medium Volume Callers	High Volume Callers	Chi Square
Call Reason			47.23**
Clinical Consultation	447(49.7%)	1165(41.4%)	
Resource/Referral	384(42.7%)	1534(54.6%)	
Other	68(7.6%)	112(4.0%)	

Notes. Comparisons based on N=3,710 calls to BHIPP so individual PCCs are counted multiple times. Other = calls about general information or calls deemed not appropriate. **p<.001

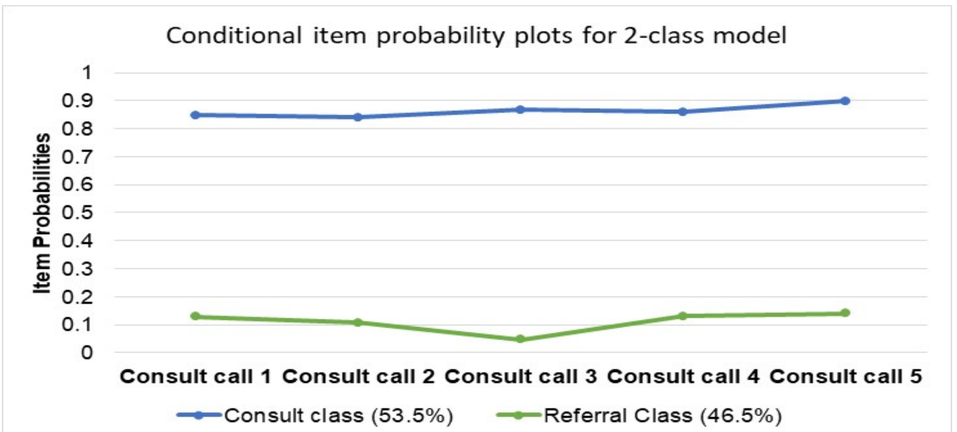

Table 3. Latent Class Differences on Provider Characteristics

Provider Characteristic	Estimate	Std. Error	Odds Ratio	p-value
PCP is a doctor (MD/DO)	0.09	0.21	1.09	.68
PCP is a pediatrician	0.34	0.25	1.40	.17
PCP in rural/semi-rural area	1.15	0.35	3.14	.001

Note. N = 374 providers who called the BHIPP line at least twice for either clinical consultation or resource/referral. Please note that the reference group for this table is the Referral/Resource class so all estimates are for the consultation class.

Conclusions

PCCs who call BHIPP are demographically similar to PCCs across the state of Maryland. There are important differences between PCCs who call BHIPP frequently and those who do not. PCCs in rural areas are more likely to call BHIPP for clinical consultation while those in urban/suburban areas are more likely to call for resources/referrals. More research is needed to understand how interactions with CPAP services contribute to PCCs practice change.

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