

Leveraging Insights from Integrated Primary Care Implementation: Characterizing Mental and Physical Health Needs in a Pediatric Population

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Background

- Childhood adversity and trauma are linked to lifetime mental and physical health problems (Felitti et al., 1998; Nelson et al., 2020).
- Tiered models of care incorporating integrated mental and physical health service delivery, evidence-based screening, and tailored referral pathways are particularly responsive to the diverse needs of pediatric populations, which vary based on developmental stage and a range of risk and resilience factors (Asarnow et al., 2015; Tebes et al., 2019).

Study aims

- Characterize the sociodemographic background, and behavioral and medical needs of a pediatric patient population across developmental stages within a large urban primary care clinic;
- Assess if children are more likely to need a physical health specialist based on trauma exposure and/or participation in trauma-informed psychotherapy interventions;
- Describe the implementation process of integrated behavioral health in primary care and trauma-informed interventions in secondary care;
- Identify and list future directions to improve equitable care access and population health approaches.

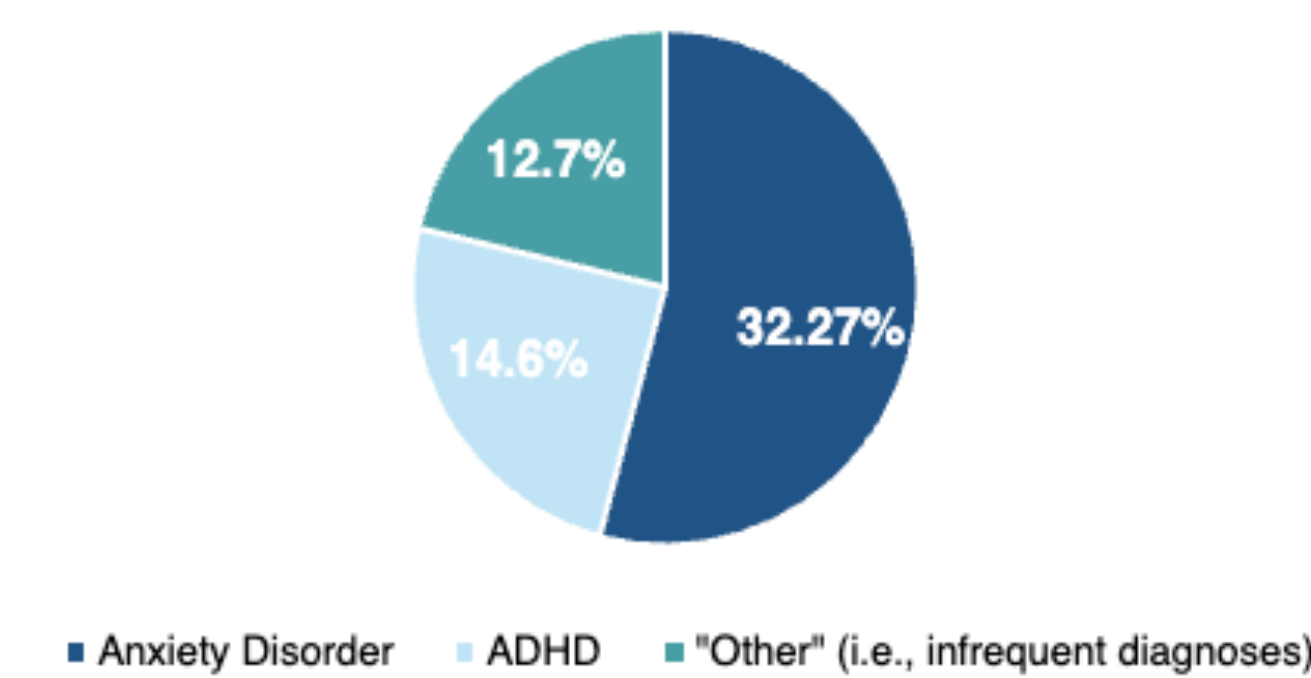
Methods

- Using a retrospective medical record review, we conducted descriptive analyses within pediatric primary care (n=9535), our pediatric Integrated Primary Care (IPC) program (n=267), and our follow-up trauma-informed care (TIC) psychotherapy interventions in our outpatient psychiatry clinic (n=63).
- Demographics, lifetime history of trauma and adversity (such as child abuse, neglect, economic insecurity, and household violence), and mental health were obtained.
- Medical diagnoses of a subsample (n=63) were also obtained by searching for keywords for a variety of chronic gastrointestinal (GI) symptoms and conditions associated with adverse childhood experiences or trauma (e.g., Functional Abdominal Pain, Chronic Constipation, Gastroesophageal Reflux Disease) in the electronic medical record.

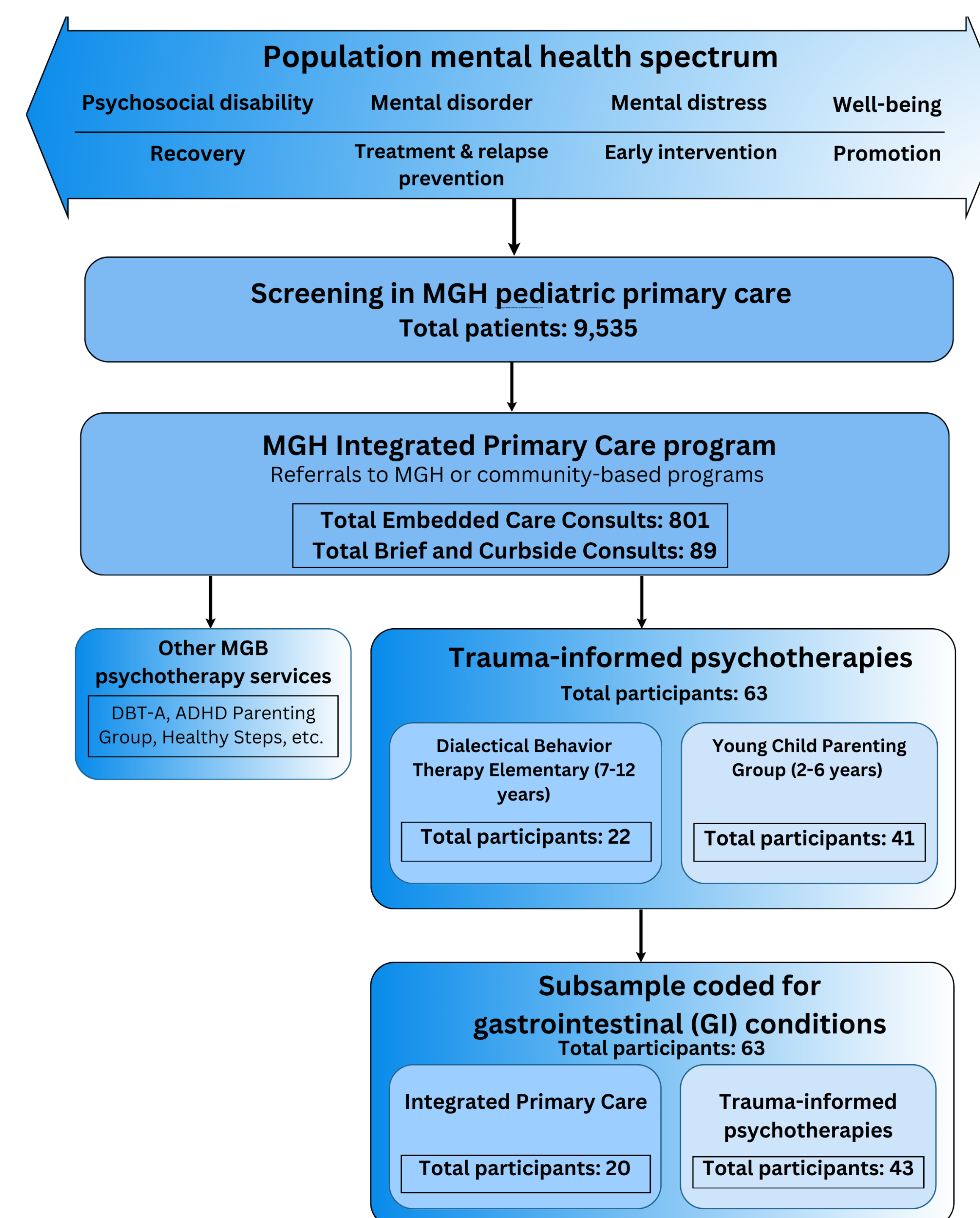
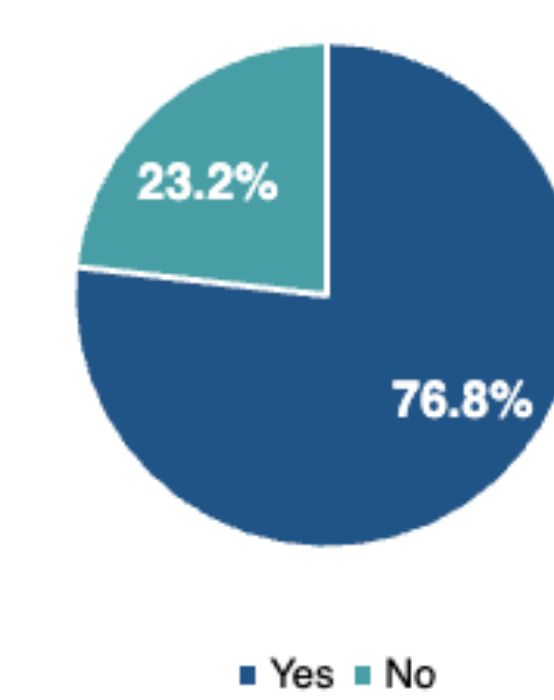
Table 1. Demographics Across IPC, TIC, and Physical Health Subsample

Variable	MGH IPC	Trauma-informed psychotherapy	Physical Health Subsample
Sex			
Male	131 (49.1%)	30 (47.6%)	29 (46.0%)
Female	136 (50.9%)	33 (52.4%)	34 (54.0%)
Race			
White	159 (59.6%)	40 (63.5%)	36 (57.1%)
Non-White	108 (40.4)	23 (36.5%)	17 (42.8%)

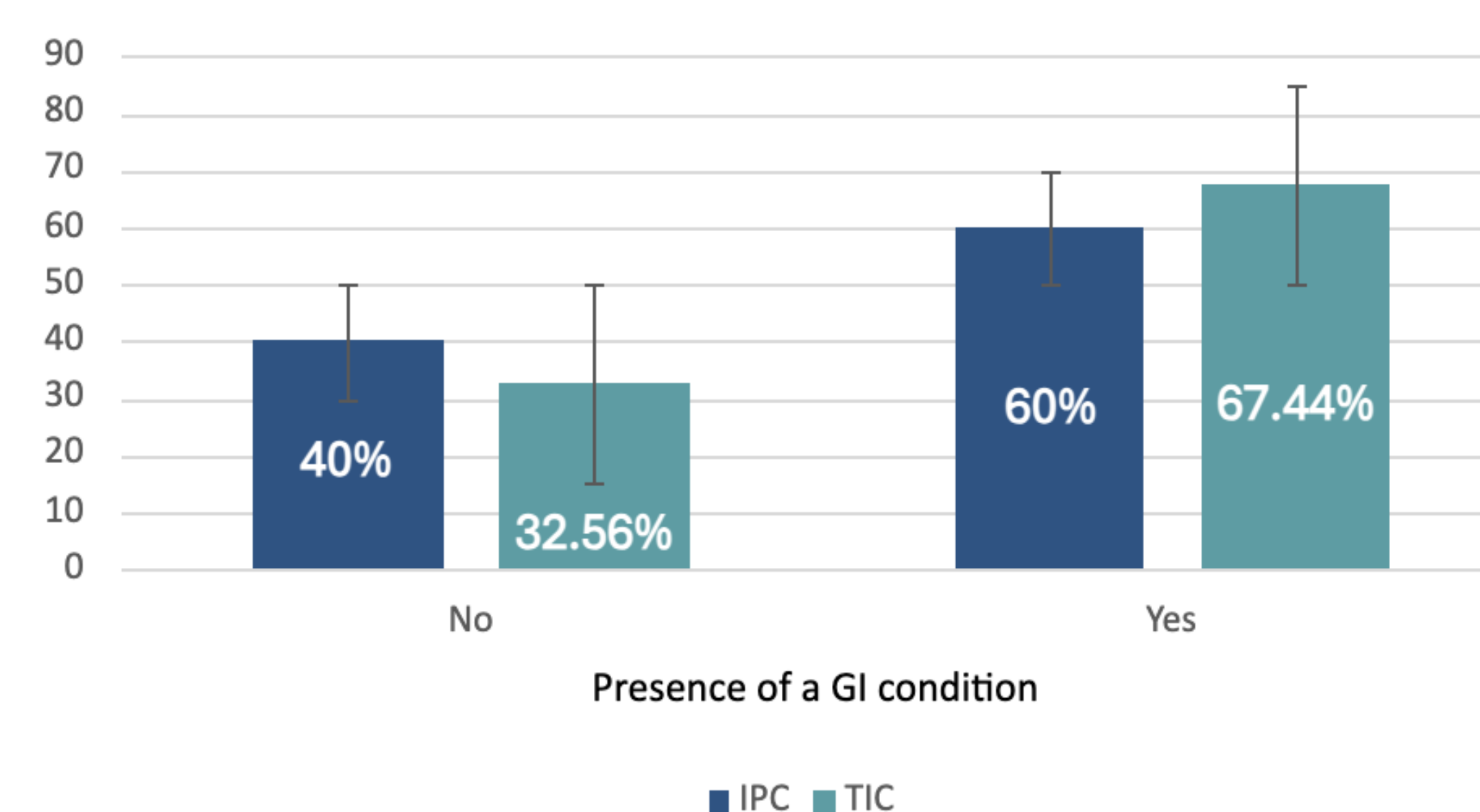
3 Most Common Billing Diagnoses in IPC (N=267)



Presence of at Least One ACE in IPC (N=267)



Presence of a GI Condition in IPC Vs. TIC



Quantitative findings

- 94.4% of IPC patients (n=267) experienced at least one lifetime trauma or adversity.
- Economic insecurity was the most prevalent adversity.
- In the physical health subsample (n=63):
 - 96.7% of TIC patients had at least one Adverse Childhood Experience (ACE; Felitti et al., 1998), and 80% of IPC patients had at least one ACE.
 - Children in TIC (67.44%, n=29) did not differ from IPC (60%, n=12) in terms of chronic GI conditions and/or symptoms. Likely driven by small sample size.
 - Controlling for age, the presence of a chronic GI symptom and/or condition is not significantly related to the total number lifetime traumas experienced between IPC and TIC.
 - Presence or absence of an ACE or trauma was not significantly related to the presence of a chronic GI symptom and/or condition.
 - Presence or absence of at least one original family-level ACE (e.g., intimate partner violence, parent mental health condition, parent incarceration) and child-level ACE (e.g., abuse, neglect, foster placement) was not significantly related to the presence of a chronic GI symptom and/or condition.

Future Directions

- Continuing pilot data collection from the electronic medical record in the IPC and TIC patient populations for chronic health conditions associated with ACEs using ICD-10 codes;
- Developing clear pathways for identifying youth at risk for developing chronic physical health conditions later in life based on their exposure to trauma and adversity;
- Identifying trauma-exposed children who need follow-up screening, who have chronic GI symptoms but no diagnosis;
- Further explore the biological impacts of trauma on the gut-brain axis, visceral hypersensitivity, altered stress response, and other pathways for physical illness.

References

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