P040 DEPRESSION SCREENING IN A PEDIATRIC IBD CENTER
Clair Talmadge, Glen Lewis, Benjamin Gold, Samantha Gomez, Bonny Reed, Dana Dykes

Introduction: Depression is a common pediatric problem affecting approximately 25% of U.S. adolescents and up to 35% of patients with Inflammatory Bowel Disease (IBD). Suicide is associated with mood disorders and is a leading cause of death for youth ages 10–25. Despite known risks of depression, up to 75% of depressed youth go unrecognized. Recently published guidelines recommend annual screening for youth 12 and older diagnosed with IBD (Mackner et al., 2019). We sought to implement these guidelines in a large outpatient pediatric gastroenterology practice.

Methods: We used quality improvement (QI) methodology and Plan-Do-Study-Act (PDSA) cycles to design and implement a pilot screening process for depression. We aimed to prospectively screen at least 80% of patients diagnosed with IBD who were at least 13 years old from March 3, 2019 to October 11, 2019. Screening was done using the PHQ-9, a brief and validated screening tool widely used in the medical setting. Initial steps of the PDSA cycle focused on training in tool administration, as well as scoring of the PHQ-9 simulated interviews, management of suicidal ideation, and office staff training. Next steps included eligible patient identification and distribution of screeners. As screening processes were improved, we focused on streamlining process of screener distribution and scoring during the visit, as well as disposition of patients based on screening results. The ImproveCareNow Depression Screening Toolkit was used as a resource for implementation.

Results: During the study period, screening of all eligible patients with IBD was implemented across three pediatric gastroenterologists within the larger practice of 15 physicians. Weekly screenings improved from 0% per week to over 80% per week at the culmination of this 32-week pilot. Across the pilot, a total of 141 patients were screened, and of these, 32% had actionable scores indicating mild, moderate, or severe depressive symptoms, with 7 of these endorsing suicidal ideation, and office staff training. Next steps included eligible patient identification and distribution of screeners. As screening processes were improved, we focused on streamlining process of screener distribution and scoring during the visit, as well as disposition of patients based on screening results. The ImproveCareNow Depression Screening Toolkit was used as a resource for implementation.

E-CIGARETTE AND CIGARETTE USE AMONG U.S. ADULT IBD PATIENTS: POPULATION-LEVEL SURVEY
Ryan Suk, Heetae Suk, Kalvani Sonawane, Ashish Deshmukh

Background: Cigarette smoking can negatively affect treatment response in inflammatory bowel disease (IBD) patients, especially among those with Crohn's disease (CD). E-cigarette use may be associated with increased risk of lung injuries. However, given the recent large number of reported e-cigarette-related lung injury cases, CDC released an interim guidance update on these lung injuries. They also coined a term EVALI (e-cigarette, or vaping, product use associated lung injury) emphasizing the possible harms in e-cigarette smoking. To the best of our knowledge, we currently do not know the recent smoking habits in American IBD patients, especially when it reveals that e-cigarette use might cause serious lung injuries.

Methods: We used National Health Interview Survey (NHIS) for 2015–2016, which is a nationally representative survey for noninstitutionalized adults in the US. Weighted counts and percentages were estimated using survey design for the population-level results. We identified those who reportedly were told by a doctor or healthcare professional that they have IBD. We first estimated the prevalence of current e-cigarette or cigarette use among IBD patients. We then estimated the frequency of use (every day or some days) among the current users. We also categorized IBD patients into 4 groups: non-smokers, those using e-cigarette only, cigarette only, and those using both, and to see the characteristics of e-cigarette users, we stratified e-cigarette users by current/former/never cigarette use status. Results: We identified 951 participants (population estimate: 3.1 million) with IBD. Among those people, 5.0% (95% CI: 3.1–6.9) was current cigarette smokers while 17.9% (95% CI: 14.8–21.0) was current cigarette smokers. Prevalence of everyday use and some-day use of e-cigarette was similar (2.4% vs 2.6%), while there was much higher prevalence of everyday use than some-day use in cigarette (15.3% vs 2.6%). Those who were using both e-cigarette and cigarette was 3.2% (Table). Majority of e-cigarette users were also currently using cigarette (63.6%, 95% CI: 48.9–78.3), while 32.7% (95% CI: 18.4–47.0) of them were former cigarette smokers. Only 3.7% (0.0–8.9) of them never used cigarettes.

Development of PROMIS Pediatric Patient-Reported Outcome Short Forms for Fatigue and Pain Interference in Children with Crohn’s Disease
Julia Schuchard, Michael Kappelman, Andrew Grossman, Jennifer Clegg, Christopher Forrest

Introduction: There is a need for reliable, valid patient-reported outcome (PRO) measures to assess the health and quality of life in pediatric Crohn’s disease (PCD). The development of PROs for this population may be facilitated by using Patient-Reported Outcomes Measurement Information System (PROMIS) item banks, which were developed using rigorous psychometric methods. We aimed to develop disease-specific PROMIS short forms by conducting qualitative research to identify the items that are most relevant to children with PCD.

Methods: Participants in an initial card sorting study included 42 children with CD (ages 8–17), 70 parents of children with CD, and 26 clinicians with expertise in CD. Using an online program, participants rated the importance of PROMIS items for pediatric CD patients. This exercise indicated that children, parents, and clinicians endorse Fatigue and Pain Interference items as important for PCD. In a separate study, trained research coordinators conducted one-on-one semi-structured interviews with 37 children with CD to further explore their experiences with fatigue and pain. Research coordinators used scripts coded for meaning units, defined as conceptually distinct statements in the words of the participant.

Results: In semi-structured interviews, highly reported facets of fatigue and its impact included feelings of tiredness, friendships, and sports/exercise. Highly reported facets of pain and its impact included feelings of hurt, friendships, family, attention, and sports/exercise. Participants’ responses revealed the same hit list and types of lived experiences of fatigue and pain as children from the development samples drawn from the general population. Ratings of children’s reasoning and logic in cognitive interviews showed strong understanding of PROMIS items. Final item selection for the PCD-specific PROMIS short forms involved consideration of the concepts that participants identified as important, item understandability, psychometric evaluation of precision and coverage, and balance across different facets of each domain.

Conclusions: Results support the content validity and comprehensibility of PROMIS Pediatric Fatigue and Pain Interference measures in PCD. This work contributed to the development of 8-item short forms that are tailored to assess the lived experiences of fatigue and pain interference in PCD.

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Conclusion: While numerous studies show e-cigarette use is generally increasing rapidly in the US, we found that 5% of IBD patients are currently using e-cigarette.