

Preventing Disease Progression:
Using a Digital Tool to Identify and Intervene on
Patients with Worsening Patient Reported Outcomes
in Inflammatory Bowel Disease



Miranda Z. Kozlicki, PharmD, CSP¹; Kristen Whelchel, PharmD, CSP¹; Laura Linscomb, PharmD¹; Josh DeClercq, MS²; Autumn D. Zuckerman, PharmD, BCPS, CSP¹

¹Vanderbilt Specialty Pharmacy, Vanderbilt Health; ²Department of Biostatistics, Vanderbilt University Medical Center

PURPOSE

- The Short Inflammatory Bowel Disease Questionnaire (SIBDQ) is a patient-reported outcome (PRO) measure used in inflammatory bowel diseases (IBD) [Crohn’s disease (CD) and ulcerative colitis (UC)] to evaluate how patients feel about their disease symptoms and control.
- Lower SIBDQ scores indicate the disease is more severely impacting the patient’s quality of life.
- The purpose of this study is to evaluate the impact of alerting pharmacists to a clinically significant drop in SIBDQ scores.

METHODS

Design	Single-center, prospective randomized comparative analysis of patients prescribed a specialty medication from the Vanderbilt Health IBD Clinic <ul style="list-style-type: none">Enrollment period: June 26, 2024 – December 26, 2024Follow-up period: December 27, 2024 – June 26, 2025
Population	Inclusion <ul style="list-style-type: none">On specialty therapy for CD or UCInitial benefits investigation completed by Vanderbilt Specialty Pharmacy (VSP)Documented SIBDQ score within 9 months of study initiation Exclusion <ul style="list-style-type: none">< 2 SIBDQ assessments in 9 monthsTransferred care

Analysis	<ul style="list-style-type: none">Wilcoxon signed rank test (p-value: < 0.001) to assess SIBDQ score changeUnivariate logistic regression to assess factors associated with number of pharmacist actions
Definitions	<ul style="list-style-type: none">Escalated dose = medication dose or frequency higher than standard FDA-approved doseRecent or in process medication change = medication or dose change within 6 months prior to or in process at the time of SIBDQ score drop
Primary Outcome	Number of pharmacist actions completed after SIBDQ score drop alert <i>This analysis will focus on the intervention arm only.</i>

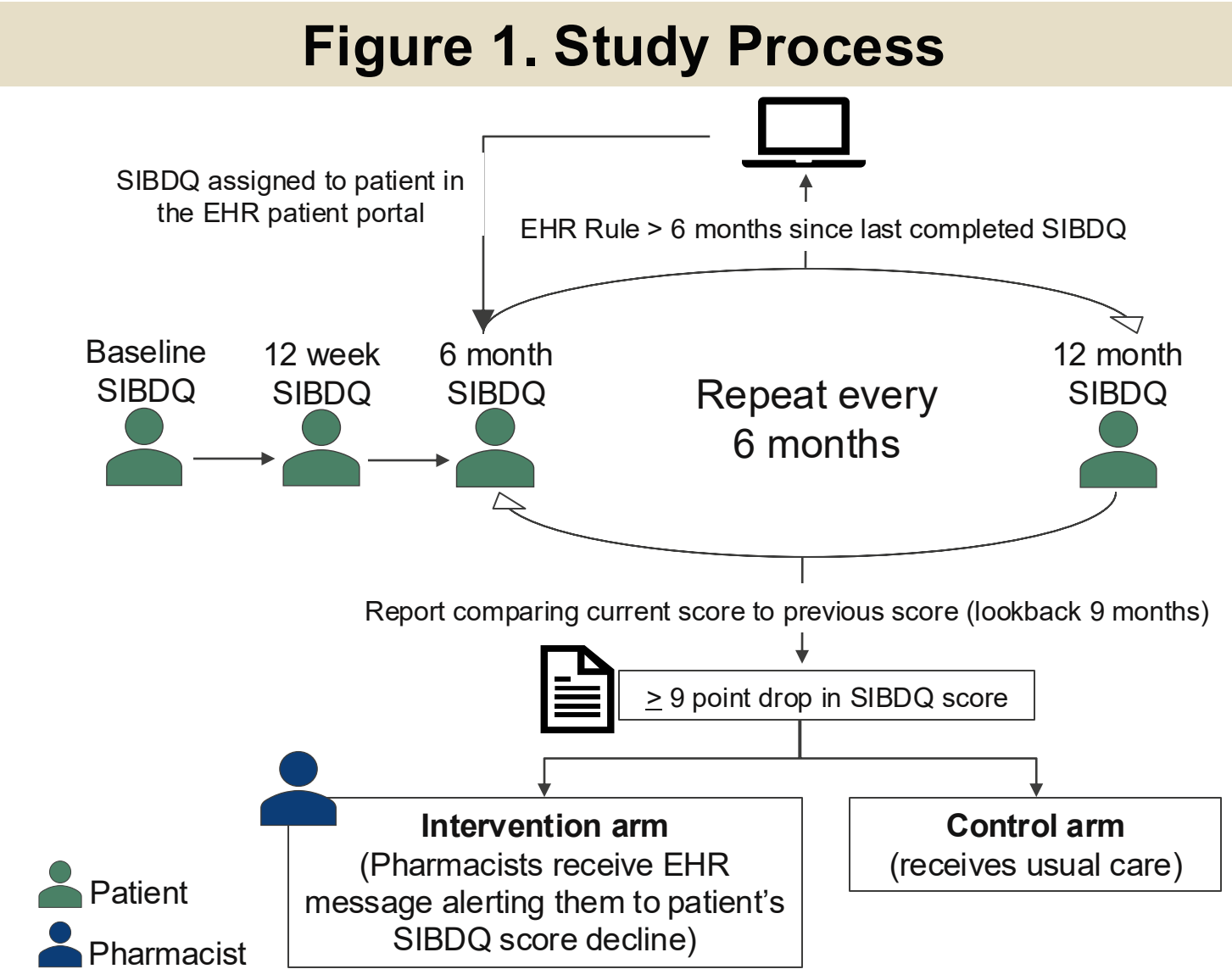


Table 1. Baseline Characteristics (Intervention Arm)	
Characteristics (n = 65)	n (%)
Age, years [median (IQR)]	43 (33 – 57)
Gender, Female	48 (74)
Race, White	56 (86)
Pharmacy Insurance	
Commercial	45 (69)
Medicare/Medicaid	17 (26)
Specialty Pharmacy, VSP	37 (57)
Diagnosis	
Crohn's disease	50 (77)
Ulcerative colitis	15 (23)
Disease duration, years [median (IQR)]	12 (5 – 22)
SIBDQ score [median (IQR)]	
Baseline	58 (51 – 63)
Current (score triggered alert)	42 (37 – 50)
Specialty medication	
risankizumab	21 (32)
ustekinumab *	19 (29)
adalimumab	17 (26)
upadacitinib	5 (8)
other	3 (6)
Specialty medication dose type	
Standard FDA-approved dose	35 (54)
Escalated dose	30 (46)
Recent or in process med change	42 (65)

