ASSESSING PATIENT-REPORTED OUTCOMES WITHIN AN INFLAMMATORY BOWEL DISEASE CLINIC AT AN INTEGRATED CARE CENTER

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BACKGROUND

- Inflammatory bowel disease (IBD) impacts a patient's quality of life and routine functioning.[1]
- Patient reported outcomes (PROs) can help assess disease status and response to medication therapy. Vanderbilt Specialty Pharmacy collects PROs through the monthly refill questionnaires (MRQs).
- Short inflammatory bowel disease questionnaire (SIBDQ) and patient health questionnaire (PHQ) are disease specific PROs routinely collected to assess disease status. An inflammatory lab marker C-reactive protein (CRP) can also be used.[2]

OBJECTIVE

To evaluate PROs in patients prescribed specialty medications by a health-system based outpatient IBD clinic and dispensed by an integrated specialty pharmacy.

METHODS

DESIGN	Single-center retrospective analysis
INCLUSION	Patients with IBD prescribed a specialty medication with: • 2+ fills through the center's specialty pharmacy, and • 2+ MRQ responses
TIME PERIOD	January through March 2020
PRIMARY OUTCOME	Patient-reported adverse events, missed doses and medication effectiveness
SECONDARY OUTCOMES	To evaluate change from patient's baseline using: SIBDQ, PHQ, and CRP

RESULTS

TABLE 1. COHORT DEMOGRAPHICS (N=181)

	n (%)
Age, years, median (IQR*)	42 (33,55)
Gender, female	95 (52%)
Race	
White	167 (92%)
Black or African American	9 (5%)
Asian	3 (2%)
Unknown	1 (<1%)
Insurance type	
Commercial	140 (77%)
Medicare	33 (18%)
Medicaid	4 (2%)
Other	4 (2%)

*Interquartile range

RESULTS

181 PATIENTS

↓

515 MONTHLY REFILL QUESTIONNAIRES COMPLETED

FIGURE 2. MISSED DOSES (N=181)

94% (n=170) of patients reported **NO** missed

6% (n=11) of patients reported at least 1 missed dose

- Ran out of medication (n=1)
- Need follow-up MD appointment prior to refills (n=2)
- Forgetfulness (n=2)
- Held due to illness or procedure (n=3)
- Hospitalization (n=4)

FIGURE 3. ADVERSE EVENTS (N=181)

99% of patients reported **NO** adverse effects

2 patients (1%) reported adverse effects on **ustekinumab**

↓ Hot flashes ↓ Headache

TABLE 2. IBD STATUS AND CHARACTERISTICS (N=181)

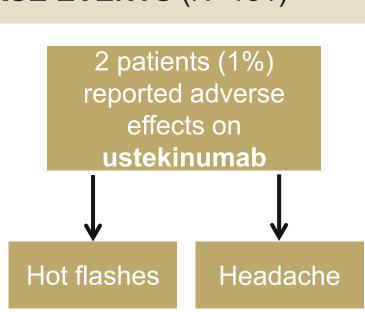|	n (%)
IBD Type	
Crohn's	158 (87%)
Ulcerative Colitis	23 (13%)
Crohn's Type	
Fistulizing disease	74 (47%)
Stricturing disease	69 (44%)
Perianal disease	60 (38%)
Disease extent	
Both small bowel and colonic	58 (37%)
Small bowel only	34 (22%)
Colonic	31 (20%)
All sites	28 (18%)
Ileal	7 (4%)
Previous IBD surgery, yes	79 (50%)
Previous biologic therapy, yes	106 (66%)

FIGURE 1. IBD SPECIALTY MEDICATIONS (N=181)

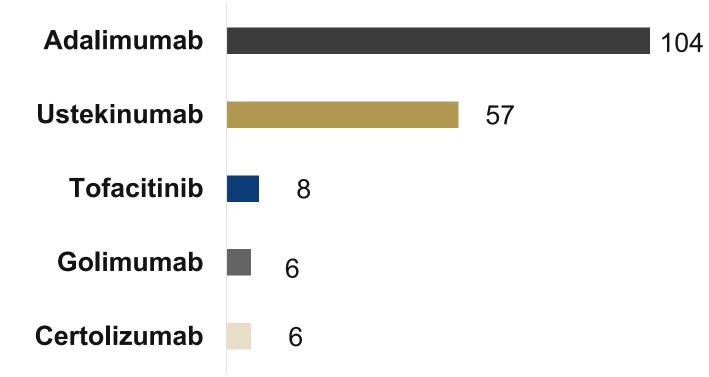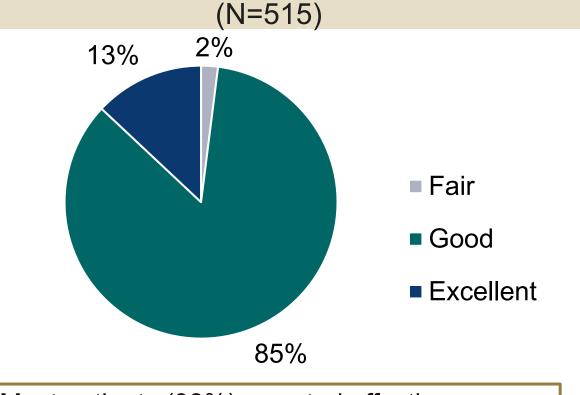| Medication	Count
Adalimumab	104
Ustekinumab	57
Tofacitinib	8
Golimumab	6
Certolizumab	6

FIGURE 4. MEDICATION EFFECTIVENESS (N=515)

Fair 2%
Good 85%
Excellent 13%
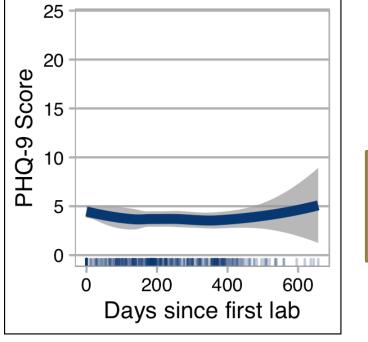
Most patients (98%) reported effectiveness as 'good' or 'excellent'.

FIGURE 5. SIBDQ, PHQ AND CRP

Most patients' SIBDQ scores decreased over time indicating an improvement in disease severity based on patient response.

Most patients' PHQ-9 scores were relatively stable over time.

Most patients' CRP lab values slightly increased over time, indicating more inflammation.
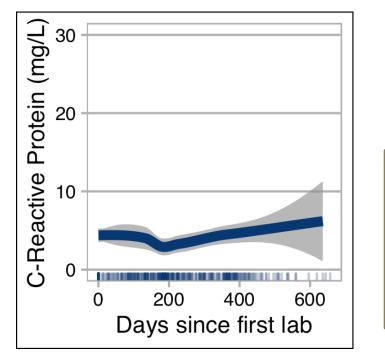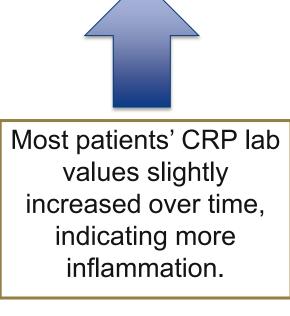
CONCLUSIONS

- Patients with IBD receiving care within an integrated care model reported high rate of medication effectiveness and low rates of adverse effects and missed doses.
- The secondary outcomes remained relatively stable, which concluded no significant differences over time when compared to the patient's baseline.
- Additional research is needed to evaluate the relationship between PROs and long-term clinical outcomes.

1. Jackson BD, et al. Examination of the relationship between disease activity and patient-reported outcome measures in an IBD cohort. Intern Med J. 2018;48(10):1234-1241. 2. Crohn's & Colitis Foundation. IBD Surveys for Clinical Practice. Corhnscolitisfoundation.org. New York, June 2018. 3. GBD 2017 IBD Collaborators. The global, regional, and national burden of inflammatory bowel disease in 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet Gastroenterol Hepatol. 2020 Jan 5.