

# HENRY FORD HEALTH Bridging Healthcare Disparities in Inflammatory Bowel Disease (IBD) through a Telehealth Hybrid Clinic Model

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## Introduction

- The prevalence of IBD in the US is greater than 3 million and rising, while the access to IBD specialists in rural areas remains limited.
- Urban areas associated with large healthcare systems have 263 specialists per 100,000 residents, whereas rural areas have only 30 specialists per 100,000 residents.
- Due to increased prevalence of IBD and lack of access to specialized care, Henry Ford Health is offering a hybrid clinic model in rural areas.

## Virtual Clinic Model

- Our Virtual Clinic offers patients the opportunity to physically present to a clinic near their homes where a nurse performs an intake, and an IBD specialist is available through telemedicine.
- According to the system based and multinational review that we conducted, this virtual telehealth clinic in a new market **is the first of its kind across the country.**

## Aim of our study

- To identify barriers to specialty care (specifically IBD), and the impact it has on healthcare cost, health outcomes, and quality of life.

## Methods

- This is a retrospective chart review conducted at a large tertiary care center.
- Data was collected between July 2021 and March 2022.
- We included all adult patients with the diagnosis of Crohn's Disease and Ulcerative Colitis living in Michigan.
- The control group consisted of in person clinical encounters at the Henry Ford IBD center.
- The intervention group consisted of hybrid clinic visits at the Saginaw Outreach clinic.

## Results

- There was a total of 68 patients in the outreach group compared to 134 patients in the control group.
- The analysis showed that 16.7% of the outreach group had presented to the ED within a year of their clinic visit compared to 18.3% in the control group (p=0.782).
- 37.9% of the patients in the outreach group had IBD complications necessitating surgical interventions within a year of their clinic visit compared to only 16.1% in the control group (p=0.001).

## Discussion

- Our study supports the previously published results as patients at our outreach clinic had a higher rate of surgeries within a year before their initial telehealth visit, as they were twice more likely to have undergone surgery.
- This difference is attributed to the lack of access to specialized care and highlight the differences in medical management.
- This first-in-class Virtual Clinic will provide longitudinal data regarding clinical remission, quality of life, surgery, and work-productivity.

Variable	Control Number	Outreach Number	P- value
<u>Age</u>	68 Mean age 42.7	138 Mean age 47.9	<b><u>0.001</u></b>
<u>Gender</u>			0.119
<b>Males</b>	(19/68)	(51/138)	
<b>Females</b>	(49/68)	(87/138)	
<u>Race</u>			0.356
<b>White</b>	(56/65)	(91/113)	
<b>Black</b>	(9/65)	(22/113)	

**Table 1: Demographics of our control and outreach groups**

**Table 2: Variables compared in our control and outreach groups**

Variable	Control Number	Outreach Number	P- value
<b>Hospitalized</b>	(16/66)	(27/137)	0.459
<b>Medical Compliance</b>	(60/64)	(126/137)	0.779
<b>ER visits</b>	(11/66)	(25/137)	0.782
<b>Prior surgery</b>	(25/66)	(22/137)	<b><u>0.001</u></b>