

# Predicting Costs in Childhood Inflammatory Bowel Disease (IBD)

**OUR AIM** was to develop a model to help predict the cost of caring for children with IBD, using linked clinical and health administrative data.

**BACKGROUND** - The incidence of pediatric-onset IBD and the costs of caring for individuals with IBD are both increasing. We calculated the direct healthcare costs of pediatric IBD in the first year after diagnosis and developed a model to predict children who would have high costs (top 25th percentile).

## Primary Outcome

The cost of caring for children with IBD in the first year after diagnosis is immense and can be predicted based on characteristics at diagnosis. Efforts that mitigate rising costs without compromising quality of care are needed.



The cost of caring for children with IBD – averaging CA\$15,168 between the 31<sup>st</sup> and 365<sup>th</sup> day after diagnosis (as seen in 487 children from Ontario included in this study).

Predictors of high costs included:

- Initial treatment with anti-TNF therapy
- Having an encounter with the healthcare system for a mental health reason
- Older age at IBD diagnosis

Lower costs were experienced by those with a regular primary care provider.

M Ellen Kuenzig, Thomas D Walters, David R Mack, Anne M Griffiths, Raquel Duchon , Charles N Bernstein, Gilaad G Kaplan, Anthony R Otley, Wael El-Matary, Winnie Yu, Xuesong Wang, Jun Guan, Eileen Crowley, Mary Sherlock, Nicholas Carman, Stephen G Fung, Eric I Benchimol

## DEFINITIONS

**Anti-TNF therapy** indicates the use of **anti-tumour necrosis factor (TNF) medications**. These are a class of advanced therapies used to treat inflammation in Crohn's disease. **Adalimumab** and **infliximab** are both anti-TNF medications.



The Canadian Children Inflammatory  
Bowel Disease Network

A Partnership with the C.H.I.L.D. Foundation

To request more  
information  
on this study email  
[info@cidscann.ca](mailto:info@cidscann.ca)

[www.cidscann.ca](http://www.cidscann.ca)