

**Abstract Submission Form**

<b>TITLE</b>	<b>IBD prevalence in Lothian, Scotland, derived by capture-recapture methodology</b>
<b>AUTHOR(S)</b>	Jones GR <sup>1</sup> , Lyons M <sup>1</sup> , Plevris N <sup>1</sup> , Jenkinson P <sup>1</sup> , Bissett C <sup>1</sup> , Burgess C <sup>2,3</sup> , Din S <sup>1</sup> , Fulforth J <sup>1</sup> , Henderson P <sup>2,3</sup> , Ho GT <sup>1</sup> , Kirkwood K <sup>4</sup> , Noble CL <sup>1</sup> , Shand AG <sup>1</sup> , Wilson DC <sup>2,3</sup> , Arnott IDR <sup>1</sup> , Lees CW <sup>1</sup> .
<b>ADDRESS</b>	<sup>1</sup> The Edinburgh IBD Unit, Western General Hospital, Crewe Road, Edinburgh EH4 2XU <sup>2</sup> Royal Hospital for Sick Children, 9 Sciennes Road, Edinburgh EH9 1LF <sup>3</sup> Child Life and Health, University of Edinburgh, 20 Sylvan Place, Edinburgh <sup>4</sup> Histopathology Unit, Western General Hospital, Crewe Road, Edinburgh EH4 2XU
<b>ABSTRACT DETAILS:</b>	
<b>Background:</b>	Inflammatory bowel disease (IBD) prevalence is estimated to be rising but no detailed, recent United Kingdom (UK) data are available. The last reported prevalence estimate in the UK was 0.40% in 2003. We aimed to establish the current, and project future, prevalence in Lothian, Scotland.
<b>Method:</b>	We conducted an extensive all-age multiparameter search strategy using inpatient IBD international classification of disease (ICD-10) coding (K50/51)(1997-2018), IBD pathology coding (1990-2018), primary and secondary care prescribing data (2009-18) and a paediatric registry (1997-2018) to identify "possible" IBD cases to 31/08/18. A team of IBD physicians manually confirmed all diagnoses through electronic health record (EHR) review as per Lennard-Jones/Porto criteria. Autoregressive integrated moving average (ARIMA) regression was applied to forecast prevalence to 01/08/28.
<b>Results:</b>	In total, 24,601 possible IBD cases were identified of which 10,499 were true positives. The point prevalence for all IBD in Lothian on 31/08/18 was 784/100,000 (ulcerative colitis (UC) 432/100,000, Crohn's disease (CD) 284/100,000, and IBD unclassified (IBDU) 68/100,000). Capture-recapture methods identified an additional 427 "missed" cases (95% CI 383-477) resulting in a "true" prevalence of 832/100,000 (95% CI 827-837).  Prevalence increased by 4.3% per year between 2008-18 (95% CI +3.7, +4.9%, P < 0.0001). ARIMA modelling projected a point prevalence on 01/08/28 of 1.02% (95% CI 0.97-1.07%) that will affect an estimated 1.53% (95% CI 1.37-1.69%) of those over 80 years of age.  IBD secondary care attendance for the prevalent cohort was assessed between 01/01/15 and 31/8/18. 43.8% of patients attended ≥1 clinic appointment, with an average of 3.3 appointments per year. We therefore forecast Lothian IBD secondary care will need to accommodate an additional 3,792 (3,080-4,503) appointments in 2028, a rise of 37.8.% (30.7-44.9) compared to 2018.
<b>Conclusions:</b>	We report a rigorously validated IBD cohort with all-age point prevalence on 31/08/18 of 1 in 125, one of the highest worldwide.
<b>References:</b>	