C. difficile infection rate in patients with IBD is falling in line with that of the general population

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Background
Several studies have reported that the incidence of C. difficile infection (CDI) in patients with inflammatory bowel disease (IBD) continues to rise [1,2]. In the UK, the incidence of CDI in the general population has been falling since 2007. Our clinical suspicion that CDI was becoming less common in patients with IBD led us to investigate CDI rates in IBD patients between 2008 and 2013 to see if CDI in IBD is also in decline.

Methods
Results of stool microbiology from all diarrhoeal samples submitted for C. difficile detection (as an ELISA for toxin B) over a 6-year period ending 2013 were assessed using the microbiology database at Barts Health NHS Trust, London. Electronic patient records for CDI-positive patients were analysed for a diagnosis of IBD at the time of infection.

Results
1079/25092 (4.3%) of all samples sent were positive for CDI, of which 49 (4.5%) were from patients with IBD. The median age (range) of the IBD CDI patients was 31.6 (1-88) years, and of the non-IBD patients 67.9 (1-98) years (p<0.0001). Of the IBD patients, 34 patients had ulcerative colitis, and 15 Crohn's disease (10 colonic, 3 ileocolonic, 2 ileal). The CDI rates in the entire group studied and in the non-IBD patients (as % of stools each year sent for investigation of CDI) decreased annually over the study period from about 7% in 2008 to 1.5% in 2013 (figure). The CDI rates in IBD patients were low throughout this period (<0.4% of stools sent).
Conclusions
Overall CDI rates at our hospital are falling. A very low and constant proportion of patients with IBD test positive for CDI. Although it remains important to test for CDI in diarrhoeal patients with IBD, the incidence of this infection in IBD has now stabilised and has remained low since 2008.

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