progress with development of methodologies to analyse the routinely coded data collected by all NHS hospitals (Hospital Episode Statistics, Outpatient and A&E attendances).

**Method** National HES data were interrogated to identify all admissions ‘belonging’ to people coded with an IBD-specific ICD-10 code (2-yr period), exploring coding variations and devising algorithms to distinguish IBD-related from unrelated admissions. At one NHS Trust, a linked dataset containing HES, OPD and A&E events (7-yr period) was merged in order to link all IBD-related activity. In collaboration with the HSCIC, we established the feasibility of linking individual (anonymized) patients from the UK IBD Registry with their routine HES data.

**Results** National HES data

84,314 patients had ≥1 admission with an IBD-specific diagnostic code (any position). We extracted their all-cause admissions (271,567). Of these, 119,045 admissions had a primary diagnosis of IBD. A further 77,957 admissions had IBD codes in position 2 or 3, but 39,515 (50%) had a relevant primary diagnosis (e.g. symptom or complication) or a procedure code that would indicate an IBD-related admission. A further 25,978 admissions had no IBD diagnosis coded but a relevant primary diagnosis or procedure (e.g. a colonoscopy).

Single Trust Datasets

1,941 IBD cases were identified by screening discharges over a 7 yr period, with 6,583 admissions categorised as IBD-related using the coding algorithms developed on national data. The activity rose to 7,507 by adding admissions recorded under an IBD consultant where relevant diagnosis or procedure codes were missing. We linked cases successfully to their OPD events (22,743 for GI specialists; 16,710 non-GI) and all-cause AED attendances (6,276; 39% discharged home). Reports of activity, patient characteristics, admission types, procedures and candidate metrics have been generated for IBD, UC and CD. Linkage of routinely coded data collected by all NHS hospitals (Hospital Episode Statistics, Outpatient and A&E attendances).

**Conclusion** The UK IBD Registry and HES have been achieved at patient-level, allowing outputs of routine data to be extracted and analysed for all registered cases.

**Disclosure of interest** None Declared.

---

**References**

1 Bodger, et al. Gut. 2014;63(7):1092-102

**Abstracts**

**PWE-054 INDEPENDENT VALIDATION OF THE IBD-CONTROL QUESTIONNAIRE: RESULTS FROM A LARGE-SCALE ELECTRONIC PATIENT EXPERIENCE SURVEY (IBD2020)**

K. Bodger,* 1T. Gledhill, 1T. Discoff, 4H. Terry, 3P. Irving, 5S. Travis; 1Institute of Translational Medicine; 2Department of Gastroenterology, Institute of Translational Medicine, University of Liverpool, Liverpool; 3The Riva Partnership Ltd, Barnet; 4Crohn’s & Colitis UK; 5St Albans; 6Gastroenterology, Guy’s and St Thomas’ NHS Trust, London; 8Nuffield Department of Medicine, University of Oxford, Oxford, UK

10.1136/gutjnl-2015-309861.503

**Introduction** The IBD-Control Questionnaire is a self-completed patient reported outcome measure developed to rapidly capture disease control from the patient perspective.1 Eight of the questionnaire items generate a summary score (IBD-Control-8) ranging from 0 (worst control) to 16 (best control). We aimed to evaluate the feasibility of capturing the items electronically (rather than on paper) and to validate their measurement properties independently within the setting of a large-scale UK patient experience survey.

**Method** The IBD2020 survey was an electronic (online) questionnaire of patient experiences of healthcare across Europe, promoted in the UK by the national charity, Crohn’s and Colitis UK. The survey included items about sociodemographics, disease type, treatments, self-reported disease activity (last 3 months), relapse status (last 12 months), disease impact and a wide range of questions about care experiences. The IBD-Control-8 questions were incorporated into the UK survey, allowing an opportunity to validate its performance.

**Results** 818 UK patients completed the survey (Female n = 611; Under 30 years, n = 259; 30–44 yrs n = 352; 45–59 yrs n = 62; 60 yrs plus n = 45; CD n = 483; Previous surgery n = 275; Current stoma n = 69). Self-reported disease activity in last 3 months: Remission 10.8%, Minimal 21.1%, Mildly 28.0%, Moderately 22.1%, Severely 8.7%, Missing 9.3%. 701/818 (85.7%) completed all IBD-Control-8 questions, (mean score [sd]: 7.3 [4.9]; range: 0–16). Internal consistency was strong (Cronbach’s alpha: 0.82). Construct validity of IBD-Control-8 was confirmed by: (a) moderately strong negative correlation (Spearman’s rho values) with ‘Disease Activity In Last 3 months’ (Overall -0.68; CD -0.67; UC -0.66; Post-surgery -0.65) and ‘Number of Relapses in Last 12 months’ (Overall -0.61; CD -0.59; UC -0.60; Post-surgery -0.58) and (b) Significantly higher mean [sd] scores for remission versus any level of disease activity (13.1 [3.1] versus 6.4 [4.5]; p < 0.001). Utility of IBD-Control-8 as a screening test to identify ‘quiescent’ patients (score of 13+) was confirmed (specificity: 88.2% versus self-reported ‘remission’ status; 95% versus remission or minimal activity).

**Conclusion** The IBD-Control-8 items from the IBD-Control Questionnaire are well suited to large-scale electronic surveys, with excellent completion rates within a lengthy patient experience survey. This study provides independent confirmation of its previously reported psychometric properties in a large cohort of UK patients.

**Disclosure of interest** None Declared.

**Reference**

1 Bodger, et al. Gut. 2014;63(7):1092-102

**PWE-055 STIGMA IN INFLAMMATORY BOWEL DISEASE: BUILDING RESILIENCE**

1. Dibley*, 1C Norton, 3M Whitehead. 1Florence Nightingale Faculty of Nursing and Midwifery, King’s College London, London; 3Faculty of Health and Social Care, University of Chester, Chester, UK

10.1136/gutjnl-2015-309861.504

**Introduction** A stigma is a deeply discrediting attribute, often contravening social norms and viewed by others as undesirable.1 People with IBD endure symptoms of diarrhoea and urgency, and 74% have some experience of faecal incontinence (FI).2 IBD and related FI may lead to stigma through violation of social hygiene rules.

**Method** This qualitative study aimed to: a) understand the experience of stigma in people with IBD and whether stigma derives from the bowel disorder diagnosis or from related FI; and how people with IBD manage these issues. Using purposive stratified sampling, 40 members of a UK IBD charity were recruited. Participants self-identified as having FI or not, and feeling stigmatised or not. Stigma was described as: being, or
feeling that you are being treated differently, feeling ashamed or guilty, worrying that others will find out about your illness, or that others will think badly of you because of your illness. Unstructured individual interviews took place in participants’ homes. Data was analysed using an interpretative method.

Results Three themes emerged: Being in and out of control (emotional command of one’s situation), Relationships and Social Support (intimate, family and professional helping networks), and Mastery and Mediation (adjusting to/balancing demands of IBD and life). Stigma arises from both IBD and FI due to sociocultural demands of physical control over bodily functions, causing distress and social isolation. Attitudes towards bodily fluids and functions learnt in childhood, personality, humour, mental health, and perspective affect the stigma experience. Adults who create robust support networks, develop a sense of emotional control, and gain mastery of their situation are more likely to become stigma-resilient over time.

Conclusion Clinicians can identify the stigma-vulnerable by asking patients about childhood attitudes towards bodily functions, and assessing personality and self-efficacy mechanisms. Patients can be more rapidly helped towards stigma-resilience and normalisation by learning to assess disease-related risks, e.g. incontinence, and make contingency plans (achieving emotional control), by learning how to tell others about IBD to secure their help (actively seeking supportive relationships), and by learning to do things differently in order to achieve tasks (mastery of IBD and life). Further research is needed to develop stigma-reduction strategies to improve quality of life for people with IBD.

Disclosure of interest None Declared.

REFERENCES
1. Goffman E. Stigma: Notes on the management of a spoiled identity. Englewood Cliffs: Prentice-Hall Inc.; 19632
2. Norton C, Dibley L, Bassett, P. Faecal incontinence in inflammatory bowel disease (IBD): associations and effect on quality of life. J Crohns Colitis. 2013;7(8): e302–311

PWE-056

FIVE YEAR PROSPECTIVE STUDY OF THE USE OF TACROLIMUS IN PATIENTS WITH REFRACTORY SUBACUTE ULCERATIVE COLITIS: FINAL REPORT

L Macken*, A Dhillon, A Harris. Department of Gastroenterology, Tunbridge Wells Hospital, Tunbridge Wells, UK

Introduction The management of moderately active ulcerative colitis (UC) refractory to standard medical treatment remains a challenge. NICE recommends tacrolimus as one of the treatment options in refractory disease. Previously we reported our experience of tacrolimus in the first 17 patients, 7 of whom remained well. Here we provide our latest results.

Method Prospective data was collected from January 2010–January 2015 on all patients with UC who were refractory to, or intolerant of, standard therapy and were started on oral tacrolimus (Prograf). Initial dosing was 0.1 mg/kg/day in 2 divided doses; monitoring was undertaken following a local policy with blood testing and tacrolimus trough levels at week 2, 4 and at 3 monthly intervals thereafter. A target trough level between 5–20 ng/ml was maintained, with dosing adjusted accordingly. Clinical response was assessed by one consultant gastroenterologist (AWH) in clinic.

Results A total of 34 patients were treated with oral tacrolimus over the 5 year period. Of these, 17 (50%) demonstrated a clinical response, however only 10 (29%) of these tolerated the drug. Of the 10 patients who continued on tacrolimus the median duration of treatment was 7 months (range 2–60 months). Reasons for intolerance included renal impairment (n = 4), hypertension (n = 2), nausea and headache, which resulted in cessation of treatment. Therefore at the end of the 5 year period only 10 of 34 (29%) patients continued on treatment with tacrolimus. Of the 24 who were either non-responders or intolerant, 15 (63%) underwent colectomy and 9 received treatment with methotrexate, a biological agent or alicaforsen.

Conclusion This 5 year prospective audit using tacrolimus in patients with refractory UC in a general hospital outpatient setting has shown that with careful monitoring the drug may be used safely with a clinical response in about a third of patients for up to 60 months. Our findings are similar to those from tertiary centres where clinical remissions of 44%6 and 20%7 were reported. No long term adverse events to date have been reported in this group however close monitoring is essential.

Disclosure of interest None Declared.

REFERENCES
1. Dhillon AS, Harris AW. Gut. 2014;63(Suppl 1):A63
2. NICE. 2013 UC:CG166
3. Ogata H, et al. Gut. 2006;55(9):1255–62
4. Lundy J, et al. ICC. 2013;7(1):e16–e521
5. Lena W, et al. IBD. 2013;19:1490–1498

PWE-057

MINDFULNESS BASED COGNITIVE THERAPY FOR INFLAMMATORY BOWEL DISEASE: THE RESULTS FROM A PILOT RANDOMISED CONTROL TRIAL

1M Schoultz*, 1Atherton, 1,2AJ Watson. 1School of Health Sciences, University of Stirling; 2Surgery, NHS Highland, Inverness, UK

Introduction Due to the relapsing nature of the disease, rates of anxiety and depression among inflammatory bowel disease (IBD) patients are higher than in the general population. Prolonged effect of such comorbidities has been associated with poorer quality of life (QoL) and exacerbation of IBD symptoms.

Mindfulness-Based Cognitive Therapy (MBCT) is an evidence-based psychological group program designed to help manage stress and depressive symptoms in depressed patients, however, no previous randomised controlled trial (RCT) has tested its possible effects on IBD patients.

Aim The aim of this study was to pilot the MBCT program with IBD patients and evaluate the feasibility of conducting a larger RCT testing the effectiveness of MBCT on depression and anxiety for IBD patients.

Method IBD patients from gastroenterology outpatient clinics at two Scottish NHS Boards were randomly allocated to MBCT intervention group (n = 22) or wait-list control group (n = 22). Both groups completed a baseline, post intervention and six months follow up assessments. A post intervention survey was conducted to assess the acceptability of the intervention and trial procedures for IBD patients.

Primary outcome was to assess feasibility and acceptability of MBCT intervention. Secondary outcome was to assess any mean differences between baseline and each of the 2 subsequent visits between the groups on depression, anxiety, quality of life, mindfulness and disease activity scores.

Results 53 (15%) IBD patients responded to the invitation to participate in the study. 44 (83%) of respondents were eligible and consented to participate in the study. The main reason for