IBD service recovery and development post-COVID

Clinical Challenges & Pearls in Contemporary IBD Care 24 September 2021 Shahida Din

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Lothian

The slides have been reviewed for off label information by Ferring Pharmaceuticals



September 2021 UK-GAS-2100114

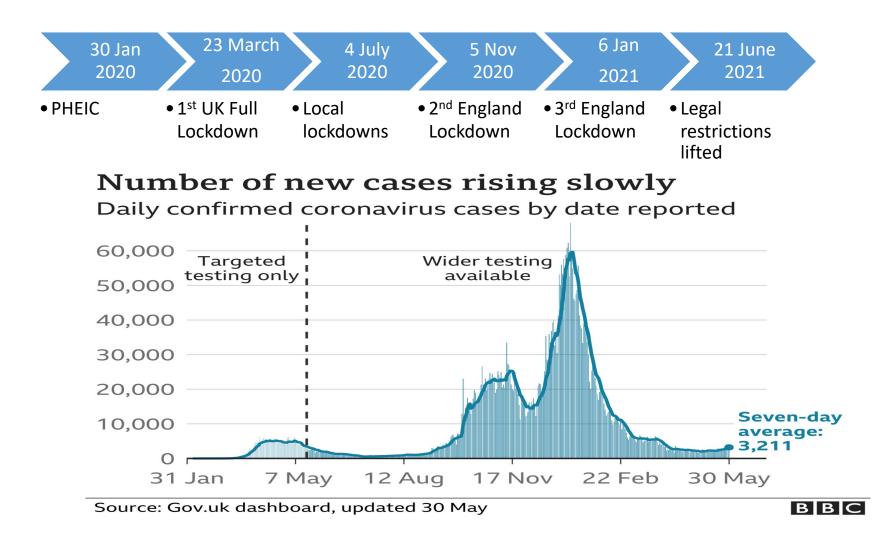
Disclosures

- Research Grants
 - Edinburgh & Lothians Health Foundation, Pathological Society of Great Britain & Ireland, The Leona M. and Harry B. Helmsley Charitable Trust, Chief Scientist Office Scotland Research Fellowship, Lord Leonard and Lady Estelle Wolfson Foundation Fellowship.
- Speaker & Consultancy Fees
 - AbbVie, Takeda, Dr Falk, and Janssen.

• In the next 20 minutes.....

- Changes in IBD clinical services in the COVID-19 pandemic
- Challenges that arose
- Redesign of services
- ➤ adaptable
- > sustainable
- ➤ resilient

COVID-19 Pandemic Timelines

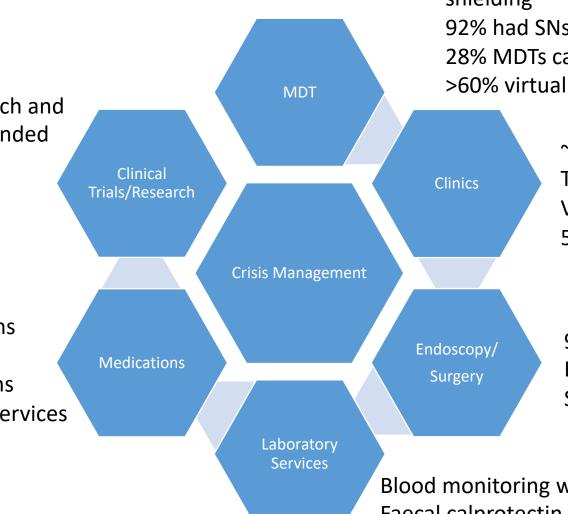


https://www.instituteforgovernment.org.uk/charts/uk-government-coronavirus-lockdowns https://www.bbc.co.uk/news/uk-57304515

GI Service Adaptations

All non-COVID-19 research and clinical trials were suspended for new recruitment

~77% maintained infusions ~50% moved to safe site >50% patient cancellations Disruption to homecare services



Redeployment, self isolation, shielding 92% had SNs redeployed 28% MDTs cancelled >60% virtual or F2F MDTs

> ~57% of normal clinics Telephone consultations >80% Video Consultations ~10% 50% had flare clinics

97% Emergency and essential Emergency Surgical care -SBO, ASUC, Perianal disease

Blood monitoring was suspended/delayed Faecal calprotectin 1/3rd had no access

> Kennedy N, *et al*. Frontline Gastroenterology 2020;11:343-350 Lees CW *et al*. Gastroenterology. 2020 Sep;159(3):805-808.e1.

Question



Which IBD service reported a 2-4 fold increase during the early phases of the pandemic?

- 1 Out patient clinics 0.0%
- 2 Endoscopy demand 0.0%
- 3 IBD Specialist Nurse Advice Line
- 4 IBD Surgery

0.0%

5 Delivery services for injectable medications

2.5%

6 Non-invasive stool testing

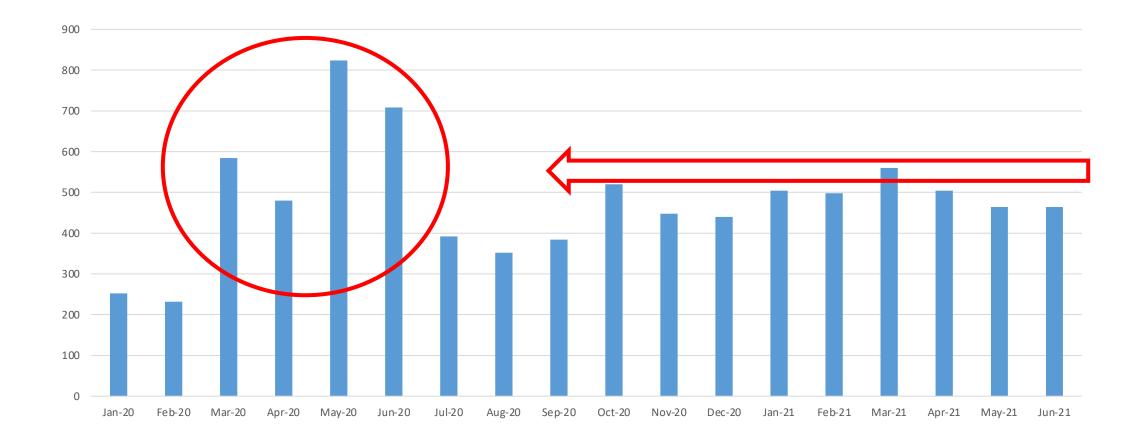
10.0%



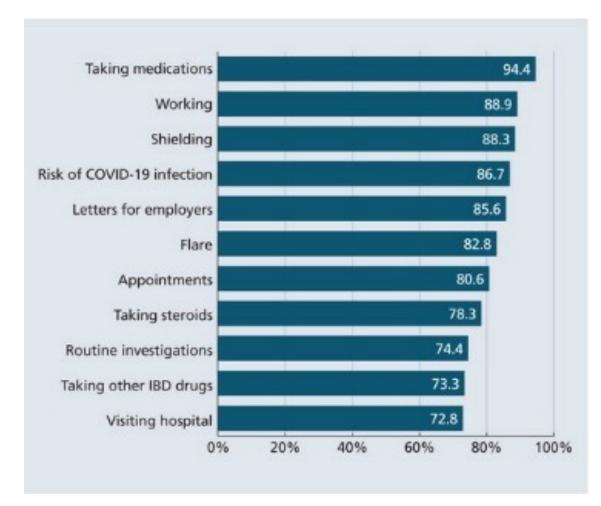




IBD Nurse Advice Line



Reasons for Calling Helpline



- Reassurance & Support
- Accurate Information
- BSG/IBD Registry COVID-19 self-assessment tool
- Crohn's & Colitis UK
- Sign-posting to relevant resources

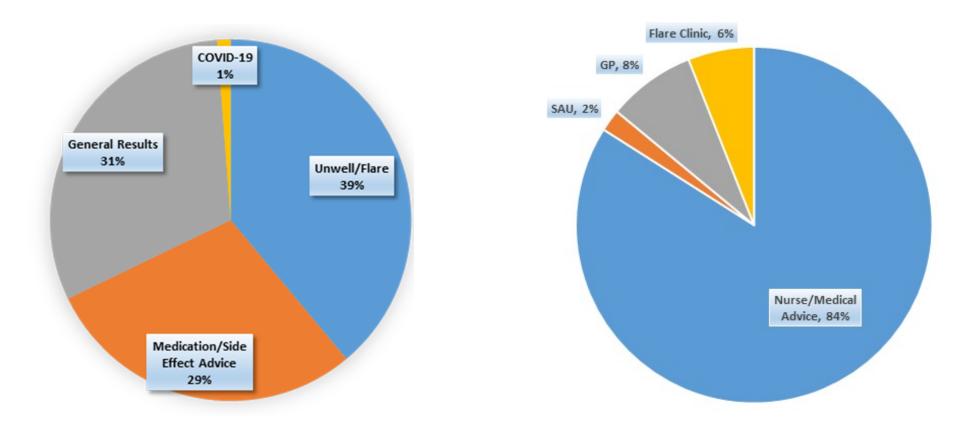
IBD Service Changes

- IBD Huddle
 - Zoom 30 mins
 - Triage = advice & treatment/flare clinic/admissions unit
 - Information Clarification
 - Signposting
 - Supported decision making
- IBD Consultant Email Service
 - Signposting HCPs

• Flare Clinics

- Urgent face to face review for treatment decisions
- Lack of faecal calprotectin/endoscopy assessments
- 2 appointments Monday-Friday
- Patients supported with one-stop
 - Polymeric diets
 - Alternatives to Prednisolone
 - Oral and Subcutaneous drugs

Snapshot IBD Advice Line Jan-Jun 2021



Flare Clinic

18th March 2020-17th March 2021

		Patients [n=218]	
Male, % (N)		44.0 (96)	
Diagnosis, % (N)	Ulcerative colitis	43.1 (94)	
	Crohn's disease	50.0 (109)	
	IBD-U	6.9 (15)	
Age (years), median (IQR)		39.0 (28.8-55.0)	
CRP (mg/L), median (IQR)		7.0 (2.0-19.0)	
Albumin (g/L), median (IQR)		38.0 (35.0-41.0)	
Faecal calprotectin, (µg/g), median (IQR)		846.0 (221.0-1106.0)	
Stool frequency, median (IQR)		7.0 (5.0-10.0)	

- 218 patients in total attended for a flare of their disease
- 163 have not been admitted (74.8%) [median follow up time (months): 9 (6-10)]
- 36 have been admitted >30 days after attendance (16.5%)
- 13 were admitted within 30 days of attendance (5.9%)
- 6 were admitted directly from clinic (2.8%)

Flare Clinic Outcomes

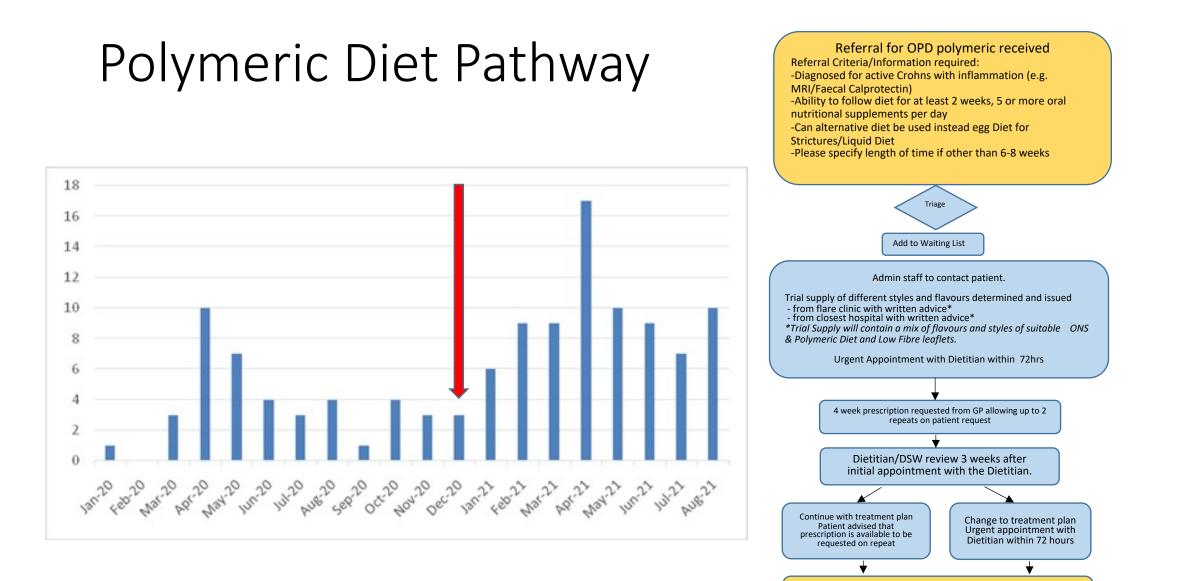
		Never admitted+admitted >30 days from attendance [n=199]	Admitted <30 days (excluding pts admitted directly from clinic) [n=13]	p value
Male, % (N)		43.2 (86)	53.8 (7)	0.454
Diagnosis, % (N)	Ulcerative colitis	42.2 (84)	46.2 (6)	0.950
	Crohn's disease	50.8 (101)	46.2 (6)	
	IBD-U	7.0 (14)	7.7 (1)	
Age (years), median (IQD)		38 (28.0 55.0)	56.0 (31.5 59.0)	0.115
CRP (mg/L), median (IQR)		6.0 (2.0-18.0)	11.0 (5.0-66.0)	0.029**
Albumin (g/L), median (iQR) Faecal calprotectin (μg/g), median (IQR)		30.0 (35.0 41.0) 715.0 (203.0-1101.0)	992 (750.0-1115.3)	0.000 0.130
Stool frequency, median (IQR)		7.0 (5.0-9.0)	10.0 (8.0-10.0)	0.011**
Change to maintenance medication initiated, 0/ (NI)		40.2 (08)	46.2 (6)	0.802
Plan to consider biologics/tofa start or change, % (N)		23.6 (47)	15.4 (2)	0.495
Polymeric diet started, % (N)		1.5 (3)	0 (0)	0.656

Flare Clinic v Admission Unit

	Male, % (N)		Pre-existing patients admitted to SAU [n=125]	Flare clinic patients [n=212] *Excludes those admitted directly from clinic	p value
			50.4 (63)	43.9 (93)	0.245
	Diagnosis, % (N)	Ulcerative colitis	78.4 (98)	42.5 (90)	<0.001**
		Crohn's disease	20.8 (26)	50.5 (107)	
		IBD-U	0.8 (1)	7.1 (15)	
	Age (years), median (IQR)CRP (mg/L), median (IQR)Albumin (g/L), median (IQR)Faecal calprotectin (µg/g), median (IQR)Stool frequency, median (IQR)Plan to consider biologics/tofa start or change, % (N)		48.0 (30.0-62.0)	38.5 (28.0-55.0)	<0.001**
			30.5 (7.0-101.5)	6.0 (2.0-18.5)	<0.001**
			33.0 (28.3-37.8)	38.0 (35.0-41.0)	<0.001**
			1020.5 (451.5-1160.0)	789 (208.0-1101.0)	0.064
			10.0 (7.0-12.0)	7.0 (5.0-9.0)	<0.001**
			7.2 (9)	23.1 (49)	<0.001**
	Polymeric diet started, % (N) Change to maintenance medications		4.8 (6)	1.4 (3)	0.063
			48.0 (60)	44.3 (94)	0.515

@ShahidaDin1_FerringNationalIBD_24 Sep 2021

Unpublished data, Dr Rebecca Grant, Edinburgh



@ShahidaDin1_FerringNationalIBD_24 Sep 2021

Unpublished data, GI Dietician Mrs Angela Kidd, Edinburgh

Dietitian review 6 weeks after initial appointment Either discharge or further follow up as required. Question

What transformation is likely to remain an integral part of IBD care?

1 Electronic case records

4.8%

2 Virtual MDTs

4.8%

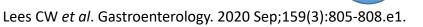
- 3 Telemedicine
- 4 IBD Patient Apps

14.3%

5 Point of care Faecal Calprotectin

9.5%







66.7%

10

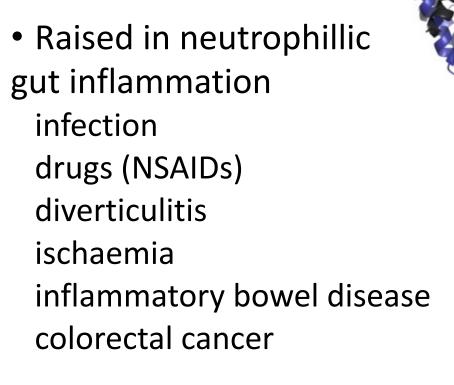
Consultant Oncall Week

16 - 22 August 2021

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
	16	17	18	19	20
		MM Week 120; Home Dosing Due; IBDClinicalTrials, WGH			
08	Emergency Endoscopy	Emergency Endoscopy	Emergency Endoscopy	Emergency Endoscopy	Emergency Endoscopy; w 🔗
09	IBD Huddle		IBD Huddle		IBD Huddle
10	Ward Rounds	IBD Huddle	Ward Rounds	IBD Huddle	Ward Round
11		Shahida's Tuesday AM		NRS Fellowship	
12		Clinic Kuchnowski, Audrey	Flare Clinic	*7.9	129 Flare Clinic
13	Flare Clinic	Flare Clinic	IBD Unit Rounds; IBD Unit 🕀	Flare Clinic	
14		Research Weekly Meeting	Fw: VC GI meeting; NHSSC		IBD MDT - VC/Teams Hybrid Microsoft Teams Meeting; V 🗇
15	Referral & Endoscopy triage, Consultant Email	Mini Ward round	Consultant Weekly Meet 🕀	Referral & Endoscopy triage, Consultant Email	Handover, clearing the decks
16	Service. Oncall Duties		Admin 1/2	Service. Oncall Duties	
17				Evening oncall	12
18					

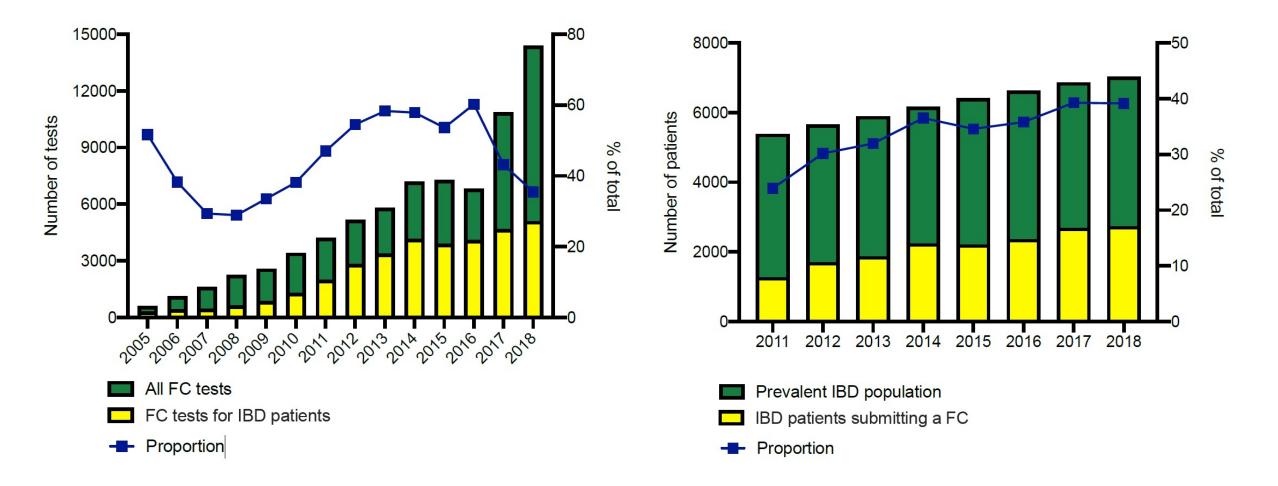
Faecal Calprotectin Protein

- Calprotectin is a 24 kDa dimer of calcium binding proteins S100A8 and S100A9
- Accounts for up to 60% of soluble protein content in the cytoplasm of neutrophils
- Measured in faeces
- 2004 ELISA test (CALPRO AS Norway)



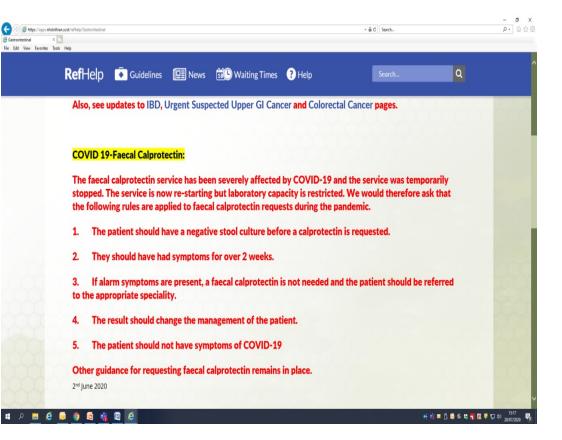


Lothian Faecal Calprotectin 2005-2018



NHS Lothian COVID-19 Effect





Faecal Calprotectin Response

- Reduction in Testing Capacity
 - Routine 26 March 2020
 - Risk Assessments
 - Update Guidance
 - Signpost to RefHelp
 - Effective Triage
 - Flare Clinics

- Shielding Patients
 - Identify high risk patients



- Lothian IBD Registry
- Faecal Calprotectin >500µg/g
 - 1 Aug 2019 23 Mar 2020
- Shielding Letters ~ 700 patients
- IBD Risk Tool
- Point of Care Testing

Point of Care Faecal Calprotectin Test

- POC Calprotectin tests (Calprosmart[™])
- Correlation with CalproLab ELISA: R2=0,875
- Home kits 3-5 tests/pack
- Value 70-1500mg/kg
- <200 Mild Green</p>
- 200-500 Moderate Yellow
- >500 Severe Red

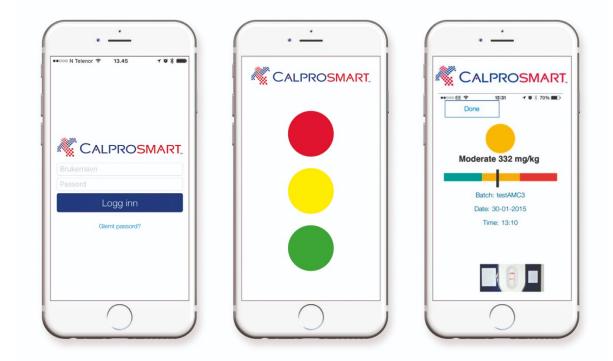


CalproSmart™

Factors

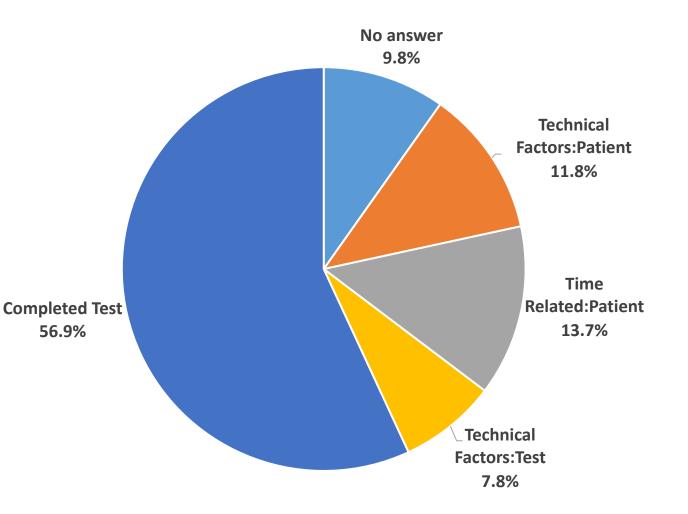
- Patient education
 - IBD Nurse
- Smartphone compatibility
 - iOS & Android
- Costs
 - Lab ELISA £12-15
- Dashboard to review results
 - Separate login access
 - Email alert for new reading
 - Not integrated TrakCare[™]

Traffic Light System



Preliminary Results

- 51 patients
 - 29 completed (56%)
- Patient related factors
- Technical/test related factors
- Patient Selection & Engagement
 - Geography
 - Travel Commitments
- Proactive Response System



Question

Which IBD service worsened during the pandemic?

1 Delays to diagnosis

27.8%

2 Monitoring of biologics / immunosuppressants

2.8%

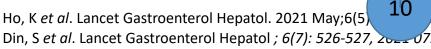
- 3 IBD surveillance colonoscopy
- 4 Complications of untreated active IBD

5.6%

5 IBD pregnancy outcomes

0.0%







63.9%

Emerging from COVID Era

- Opportunity to transform how we provide care
- Align this to the 2019 IBD Standards and benchmarking reports
- Leverage resources to reduce variation in care
- MDTs
- Promote services which are traditionally not prioritised such as dieticians/psychological input

- IBD Nurse Advice Line
- Transformed Consultant Oncall
 - IBD Huddle
 - Flare Clinics
- Polymeric Pathways
- POCT CalproSmart[™]
- IBD Colonoscopy Surveillance
- Monitoring Processes/Community Based Care
- New Diagnosis Pathway

IBDUK Standards: High Quality Clinical Care

- "The aim of the IBD Standards is to remove variation in care. They're designed to ensure that people with IBD receive safe, consistent, high-quality, personalised care, whatever their age and wherever they live in the UK."
- High quality clinical service
 - Adaptable
 - Sustainable
 - Resilient



Din, S et al. Frontline Gastroenterology doi: 10.1136/flgastro-2021-101805



Acknowledgements





GI Team WGH



UNIVE,











National IBD Doctors Annual Meeting 2021

CLINICAL CHALLENGES & PEARLS IN CONTEMPORARY IBD CARE

