IB*Doc*® Faecal calprotectin self-test retrospective audit in a District General Hospital (DGH)

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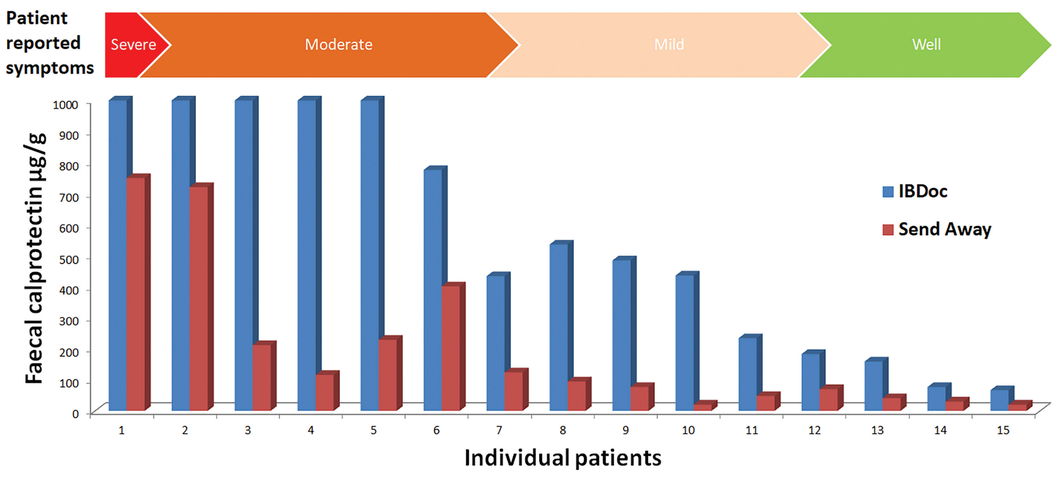
Background

In 2016 a DGH in England commenced the IB*Doc* Faecal calprotectin test. Using smart phone technology, the test can provide results as quickly as 2 hrs. An audit of patients who trialled the test was presented at ECCO in 2018 (Avery and Wilson 2018); this abstract looked at the value of the tests and helped to show the investigations worth to the DGH trust. Fifteen tests were completed for both the IB*Doc* and the CALPRO ELISA and the results are shown in Figure 1 correlated against the patient reported Symptoms.

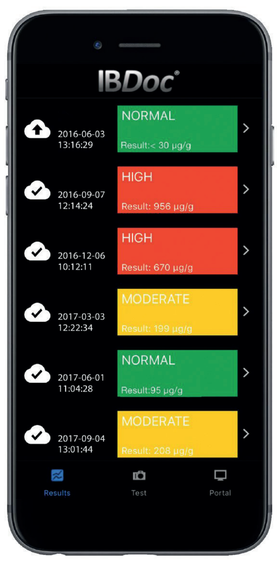
The continued use of the test at the trust has recently been audited and these data are presented by the authors to help further understand the benefit to patients and to services of this self-care test.

Figure 1.



Methods

A retrospective audit of patients enrolled on the IB*Doc* between July 2017 and October 2019 was carried out by the IBD nursing team. Electronic patient records were searched and corresponding endoscopic assessments that had been carried out within 6 months of the most recent IB*Doc* results, were documented for each patient. The terms normal/mild, moderate and severe were used to categorise inflammation seen at colonoscopy, flexible-sigmoidoscopy (C/FS) and/or histopathology (HP). The IB*Doc* uses the categories normal, (<150) moderate (<400), and high (>400); these values have been set locally easy comparison of these data is possible due to the three levels of stratification.
The reason for the endoscopic investigation was also documented. In the sample where no endoscopic investigation was recorded, outcomes were categorised into three groups; well (W), increase monitoring (IM), and treatment adjustment required (TAR).



Results

n=134 patients are signed up to the IB*Doc*, n=23 patients failed to carry out the test successfully (CD n=14 and UC n=9). n=6 did not accept a test in clinic due to changing their mind or failure in smart phone technology, n=12 did not do the test before expiry* and n=5 failed to give a result due to difficulties completing the test. *Myriad of reasons were given for not doing the test and another paper could be written to attempt to understand the persons motivation for not completing the test.

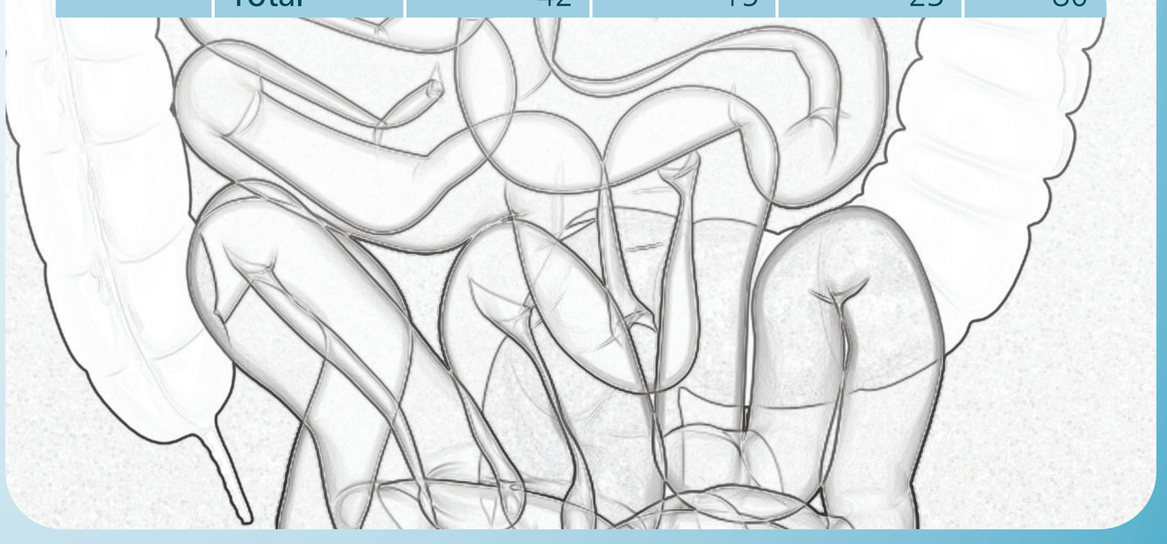
Of the 111 patients' (CD n=55, UC n=56, IBDU n=2 and non IBD n =2), n=80 patients did not undergo a C/FS, of the n=31 that did, correlation between calprotectin, C/FS and/or HP result was 84%. at 100% best correlation was seen in the severe C/FS results and high IB*Doc* results. C/FS were carried out for diagnosis (n =10) surveillance (n =4) and disease assessment (n=17).
In the n= 80 patients with no colonoscopy's were assessed for outcomes and are
W. n=39.
IM. n=19.
TAR. n=23.

Endoscopic test compared to IB*Doc*

		Colonoscopy			
		Normal/ Mild	Moderate	Severe	
IB*Doc*	Normal	8	0	0	8
	Moderate	1	1	0	2
	High	5	8	8	21
	Total	14	9	8	31

No colonoscopy patient disease state

		Outcome			
		Well	Monitor	Adjust	
IB*Doc*	Normal	41	2	1	44
	Moderate	1	7	0	8
	High	0	6	22	28
	Total	42	15	23	80



Conclusion

The above data shows continuing value of the IB*Doc* faecal calprotectin self-test, and there is correlation seen in the comparative results but limitations in these data is noted due to the length of time between colonoscopies and Calprotectin. This could provide the basis of a more formal correlation between the IB*Doc* and endoscopic evaluation. This information helps separate well from unwell patients, offering further opportunities to promote supported self-management in people with IBD and prioritisation of clinic appointments.

Reference List:

Avery, P. and Wilson, R., 2018. N026 IB*Doc* self-care/point-of-care calportectin test: Early value in a district general hospital inflammatory bowel disease service. European Crohn's and Colitis Organisation [online].