Conclusion Information specific to family planning stages need to be provided, to help women and their partners make the informed decision about family planning. Those who decided not to go down the family route, also expressed a need for counselling and support.

**O20** SHOULD MENTAL HEALTH SUPPORT AND MONITORING FORM PART OF REGULAR IBD ASSESSMENT AND TREATMENT?
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10.1136/gutjnl-2020-bsgcampus.20

**Aim** There is increasing awareness of the impact of IBD on fatigue symptoms, anxiety, depression and quality of life. We aim to assess the likely incidence of depression, anxiety and fatigue in our patient cohort and to use this data to help guide our clinic assessment and to gain recognition of mental health disorders in this patient cohort to help guide assessment, regular clinic reviews and treatment. The PHQ-9 is not a screening tool for depression but is used to monitor severity of depression and response to treatment. It can be used to make a tentative diagnosis of depression in high risk populations eg, in patients with chronic diseases or after a stroke. A PHQ-9 score of >/= 10 has a sensitivity of 88% for depression.

**Method** Patients attending nurse led IBD clinics and MDU appointments for biologic therapy were asked to fill out an anonymous questionnaire regarding their IBD diagnosis, current treatment and a PHQ-9. Patients were asked whether they felt that their IBD diagnosis had a negative impact on mental health.

**Results** 77 patients completed the questionnaire. 57% of patients felt that their diagnosis of IBD had a negative impact on their mental health. 11 patients had undergone surgical procedures as part of their treatment for Crohn’s disease. 82% (9/11) scored >10 on PHQ-9 indicating a high probability of significant depression in this patient cohort. None of these patients were on treatment for depression or anxiety. 12 patients reported current treatment for anxiety of depression. Out of this group only one patient reported a PHQ-9 score </= 4. Other scores ranged from 5 -26 which could indicate that depression/anxiety remains inadequately treated.

**Disease distribution** Crohn’s disease 42/77; 55% (17/42; 40% PHQ-9 >/= 10 moderate to severe depression).
IBD unclassified 3/77; 4% (3/3; 100% PHQ-9 >/= 10 moderate to severe depression)
Ulcerative colitis 32/77; 42% (12/32; 37.5% PHQ-9 >/= 10 moderate to severe depression)

**Conclusion** There is a high incidence of depressive symptoms in our IBD patients with 69% of patients reporting symptoms that could be attributed to a mental health disorder – 16% with a PHQ-9 score indicating moderate to severe depression. A majority of the patients are receiving IV biologic therapy – almost all with quiescent disease. This patient group are more frequent users of secondary care IBD support. We need to have the resources and skill set to address these symptoms when seen in IBD clinic and to ensure communication with GP and patient helps facilitate appropriate treatment. Funding and resources should be made available to help IBD teams adapt to these increasing demands in the hope that active management of mental health symptoms will have a positive impact on IBD management and long term quality of life.

**Liver**

**O21** INTELLIGENT LIVER FUNCTION TESTING: 18 MONTHS OF REAL WORLD DATA
1Iain Macpherson*, 2Jennifer Nobes, 2Elizabeth Furrer, 2Ellie Dow, 2Michael Miller, 1John Dillon, 1Gut Group, University of Dundee; 2Department of Blood Sciences, NHS Tayside
10.1136/gutjnl-2020-bsgcampus.21

**Introduction** Liver Function Tests (LFTs) are abnormal in 20% of cases in primary care. In addition, mortality from chronic liver disease continues to rise.

Intelligent liver function testing (iLFT) was designed to improve diagnosis of liver disease, the quality of further investigations, and optimise the time of referral to secondary care. This will reduce both mortality and cost to practitioners. Following a trial it was launched in Tayside, Scotland in August 2018. Referrers provide information on alcohol intake, BMI and comorbidities, and those with abnormal LFTs have reflex tests including non-invasive fibrosis scores, without further venepuncture. General Practitioners (GPs) are provided with management plans with a recommended outcome: secondary care referral for fibrosis assessment or treatment; primary care follow up of early liver disease; or when a diagnosis is unclear, staging information including referral criteria.

**Methods** A retrospective analysis was performed of all patients who had iLFT requested by GPs in the first eighteen months (August 2018 – January 2020) of the live system, recording the outcome(s) for each request.

**Results** 4194 requests were received for iLFT in the first eighteen months from launch. iLFT did not cascade in 1106 cases, either because all liver enzymes were normal, or because insufficient data was provided. There were 4012 iLFT outcomes. The most common outcome was isolated ALT elevation without fibrosis (n=884; 22%), followed by alcohol related liver disease without fibrosis (n=534, 13.3%) and non-alcoholic fatty liver disease with fibrosis (n=354; 8.8%). The frequency of each outcome is shown in figure 1.

Secondary care referral was recommended in 951 (23.7%) cases; of which 732 (77%) were for fibrosis assessment only.

Abstract O21 Figure 1 Outcomes generated by iLFT in the first 18 months of live system
The remaining 3061 (76.3%) outcomes recommended primary care management.

The number of iLFT requests rose each month from launch, from 159 in November 2018 to 431 in December 2019, and these now make up over 3% of all LFT requests in Tayside.

Conclusions iLFT safely and rapidly detects patients at risk of chronic liver disease using reflex fibrosis scores and autoim- mune, virology and genetic tests. Secondary care referral is recommended in only 24% of cases, and thus 76% of patients can be managed in primary care. The number of iLFT requests is rising each month. GPs initially used iLFT to investigate patients known to have abnormal LFTs, resulting in high numbers of full test cascades. iLFT is now being used as the first test, so the number cascading is falling, but still improving the diagnosis of liver disease. This ensures patients who require secondary care are seen, whilst reducing unnecessary referrals.

### Abstract O22 Table 1

<table>
<thead>
<tr>
<th>Cumulative incidence at 3 years follow-up</th>
<th>10–15kPa n=1318</th>
<th>15–25kPa n=799</th>
<th>&gt;25kPa n=809</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liver event</td>
<td>0.04</td>
<td>0.07</td>
<td>0.18</td>
</tr>
<tr>
<td>HCC</td>
<td>0.01</td>
<td>0.02</td>
<td>0.06</td>
</tr>
<tr>
<td>Liver transplant</td>
<td>0.01</td>
<td>0.03</td>
<td>0.06</td>
</tr>
<tr>
<td>Death</td>
<td>0.03</td>
<td>0.04</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Conclusions Transient elastography is strongly associated with outcomes in two large contemporary cohorts of patients with ACLD. EHR data can be used to accurately define clinical progression in these patients. The outcomes described above are comparable to landmark descriptions of patients diagnosed using liver biopsy. Identification of ACLD using TE is a rational basis for a national cirrhosis registry to facilitate quality improvement and clinical trials in patients with liver disease.

### Abstract O23

**Introduction** Primary prophylaxis of variceal haemorrhage with non-selective betablockers (NSBB) or variceal band ligation (VBL) is now standard of care. There has been debate with regards to the safety and efficacy of NSBB however it has more recently been hypothesised that NSBB may be associated with improved survival.\(^1\)\(^2\) The aim of this study was to assess mortality in a cohort of patients randomised to either NSBB or VBL.

**Methods** We retrospectively analysed 146 patients recruited to a multi-centre RCT between 07/04/2000 and 24/06/2006 designed to assess the efficacy of VBL versus NSBB in preventing first variceal bleed.\(^3\) We used electronic records to undertake a long term follow-up (up to 20 years) of this patient group with the primary outcome of all-cause mortality and secondary end-points of liver disease-related mortality and transplant-free survival in patients within each treatment arm.

**Results** 146 patients were included in analysis with baseline characteristics well matched between the NSBB (n = 73) and VBL (n = 73) group. Mean Child-Pugh score at inclusion was 8.01 in NSBB group and 8.31 in VBL group. 127 had died or undergone liver transplant (LT) in the follow up period. NSBB offers a significant survival advantage when all-cause mortality is assessed with median survival in NSBB group of 7.82 years (95% CI 5.54–10.16), whereas median survival in VBL group was 4.18 years (95% CI 2.91–5.46) \(p = 0.027\) as shown in figure 1. A significant survival benefit is maintained when transplant-free survival is assessed with median survival of 5.25 years (95% CI 2.54–7.96) in NSBB and 3.02 years (95% CI 2.48–3.56) in VBL group \(p = 0.049\). Significance does not extend to liver-related mortality with median survival 3.25 years (NSBB) and 2.33 years (VBL) \(p = 0.238\).

**Conclusions** These data suggests that NSBB offers a significant survival benefit for patients with liver cirrhosis and portal