Engagement was measured as the proportion of actual ultrasound attendances versus number of expected ultrasound attendances. Descriptive analysis was done with SPSS version 27.

Results Our cohort was comprised of 45 patients (mean follow up of 2.34 years (SD±357 days)). In the more deprived 50% of the cohort there were significantly more males $\chi^2(1, N=45)=4.60$ $p=0.39$, other baseline characteristics are reported in table 1. The median cumulative rate of actual versus expected surveillance events across the cohort was 0.67(0.40, 1.00). Figure 1 shows there was no significant difference in engagement between the less deprived groups (0.63 vs. 0.63; $p=0.83$). There was no significant association between outcomes dependant on IMD, 33/45 patients are under continued follow up, shown in chart 1.

Conclusion Engagement at this service is equivalent irrespective of IMD. Attendance rates at this service are comparable with the literature, demonstrating this services' ability to overcome barriers such as deprivation.

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P046

LIVER RE-TRANSPLANTATION IN ADULTS; A SINGLE UK CENTRE EXPERIENCE (2009–2020)

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Liver transplantation is a life-saving modality for liver failure. Graft failure occurs in 5–22% of all liver transplant recipients.^{1–6} Liver re-transplantation has been considered controversial, with clinical, economic, and ethical considerations. A study from Birmingham in 2009, reported no survival benefit following second and third re-transplantation.^{4–6} However, recent international data has suggested that survival following re-transplantation is comparable with first re-transplantation.⁷ The data from one of the UK's largest liver transplant centres has been re-evaluated to provide contemporaneous knowledge to inform clinicians and assist with complex decision-making.

A retrospective study from January 2009 to March 2020. All adult patients who underwent first, second or third re-transplantation during this study period at xxxxxxxx were included. Data collection included primary diagnosis requiring liver transplantation, aetiology of graft failure, donor and recipient factors and time interval between graft transplantation. Overall graft and patient survival rates were analysed with Kaplan-Meier curves.

Abstract P046 Figure 1

There were 2454 adult and paediatric transplants during the study period. 6.6% (161) were re-transplanted, of which 15.5% (25) had a third retransplant and 1.2% (2) a fourth. The commonest indication for initial transplant in those who were subsequently re-transplanted were: PSC (25.5%), HCC (12.4%), Seronegative (9.3%) and PBC (9.3%). 12.8% of all grafts were DCD and 97.8% of these were used for initial transplant. Mean age at the time of first graft was 40 (range 0–68), second graft 44 (range 9–69) and third graft 33 (range 14–63). The most frequent reasons for re-transplantation were thrombotic and non-thrombotic graft infarction (28.7%), biliary complications (20.7%), early graft dysfunction (18.6%), graft rejection (17.5%) and recurrence of disease (14.9%). Mean MELD score prior to 1st graft was 13, 2nd graft 21 and 3rd graft 22. Machine perfusion was utilised for 13 re-transplants. Patient survival following 2nd graft at 12, 24 and 60 months was 96%, 86% and 80% respectively. Patient survival following 3rd graft at 12, 24 and 60 months was 96%, 96% and 84% respectively. Graft survival after 2nd graft was 90%, 82% and 79% at 12, 24 and 60 months, respectively. Graft survival after 3rd graft was 100% at 12, 24 and 60 months respectively.

Outcomes following re-transplantation have improved in the last 10 years despite increasing use of marginal donors. This could reflect careful patient selection, increased experience, and use of new technologies. Further study is suggested to identify specific factors influencing outcomes. Our findings support re-transplantation in carefully selected individuals

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P047

NUTRITION IN DECOMPENSATED LIVER DISEASE: A REGIONAL TRAINEE-LED AUDIT INVESTIGATING MALNUTRITION AND THE IMPACT OF NUTRITIONAL INTERVENTIONS FOLLOWING ADMISSION WITH DECOMPENSATED CHRONIC LIVER DISEASE

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Introduction Malnutrition results in prolonged inpatient stay, high readmission rates and poor clinical outcome.^{1–3} Malnutrition in cirrhosis is a poor prognostic factor.⁴ Assessing nutritional status is problematic as traditional methods of assessment are inaccurate.⁵ Decompensated cirrhosis (DC) patients often require nutritional support but optimal timing of intervention and outcomes are unclear.^{6–7} A regional audit assessing the prevalence of malnutrition in DC, nutritional management, impact on length of stay, readmission and mortality was conducted.

Method All adults admitted with DC from 1–30 November 2019 to four acute xxxx hospital Trusts were retrospectively identified from coding. Malnutrition was assessed by MUST and Royal Free Hospital–Nutritional Prioritisation Tool (RFH–NPT) screening tools.⁸

Results 47 patients were identified. Patient demographics, liver disease aetiology, baseline biochemical, disease severity, nutritional assessment and mortality were collected (table 1). Prevalence of malnutrition was 76.6% (CI 62–87.6%) which was independent of age or aetiology of liver disease but was associated with disease severity. There were higher rates of screening on gastroenterology wards ($p=0.012$) compared to other wards. Nutritional supplementation was prescribed in 27 (60%) patients, 78% of which was oral supplementation. Median length of hospitalisation was 9 (2–62) days. This was longer in those prescribed nutritional supplements (median 11:7 days). Those prescribed supplements were more likely to have more severe liver disease (MELD 20:15; $p=0.006$). Readmission rates at 1 month were similar in those prescribed nutritional supplements than those not (35% vs 36%). Mortality was higher in malnourished patients ($p=0.03$) and in the group of patients prescribed nutritional supplements versus not at 1, 3 and 6 months.

Conclusions Malnutrition is widespread in DC being present in 76.6% of this cohort as compared to 30% in hospitalised patients. Malnutrition was independently associated with early readmission and mortality. The RFH–NPT was significantly

Abstract P047 Table 1 Patient demographics, liver disease aetiology, baseline biochemical data, disease severity, nutritional assessment and patient mortality (n=47)

Parameter	
Male:female n (%)	26:21 (55:45)
Age in years (median (range))	62 (16–86)
Liver disease aetiology n (%)	
Alcohol related liver disease (ARLD)	22 (47)
Non-alcoholic fatty liver disease (NAFLD)	12 (26)
Viral	8 (17)
Autoimmune	3 (6)
Other	2 (4)
Disease severity:	
Child Pugh n (%)	A – 4 (8), B – 22 (47), C – 21 (45)
MELD (median (range))	20 (6–32)
Patient management	
Patients admitted to Gastroenterology ward n (%)	36 (77)
Nutritional assessment	
Malnourished by MUST n (%)	26 (55)
Malnourished by RFH–NPA n (%)	36 (77)
Malnourished n (%) by Child Pugh	A – 2 (50), B – 16 (72), C – 18 (86)
Patients screened for malnutrition (Gastro ward) n (%)	30 (83)
Patients screened for malnutrition (Non-Gastro ward) n (%)	5 (45)
Time to nutritional/dietetic assessment (median (range))	4 (1–14)
Patients receiving dietician review (Gastro ward) n (%)	19 (52)
Patients receiving dietician review (Non-Gastro ward) n (%)	4 (45)
Patient mortality	
No nutritional supplements prescribed at 1,3 and 6 months n (%)	3 (18), 4 (24), 6 (35)
Nutritional supplements prescribed at 1,3 and 6 months n (%)	10 (33), 14 (47), 14 (47)

more sensitive for detecting malnutrition in cirrhosis compared to MUST. Though screening was better on Gastroenterology wards, it is of concern that this was incomplete for many patients nor was a dietician review accomplished in all malnourished patients. Our results indicate that initial in-patient nutritional interventions do not appear to impact on early readmission or early mortality. A larger multi-centre audit would be required to evaluate the impact of specific nutritional interventions on longer-term outcomes. We propose early management of malnutrition at all possible clinical interactions with specialty dietician involvement. Both primary and secondary care guidance could be adapted to achieve this.

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