

Quality of scans in an Advanced Nurse Practitioner (ANP) led FibroScan® clinic.

Dr T. Sheehan, Dr M. Skelly

Introduction : Transient Elastography is a pulse echo ultrasound used to assess liver fibrosis in patients with chronic liver disease. This is an outpatient service offered to referring physicians, whose patients have risk factors for developing cirrhosis. Due to the Covid-19 pandemic, many outpatient services have been cancelled or delayed, and staff responsibilities have been stretched. Our GI department has a shortage of medical staff and has redesigned service delivery to optimise resources as we emerge from the curtailment of services during the Covid 19 pandemic.

Aims/Background: To assess quality of scans performed by an ANP in a new role delivering our FibroScan® service and to compare with the pre-pandemic delivery of scans by one Consultant and a number of NCHDs. FibroScan® are usually delivered by Consultant or training NCHD. We assess whether we can reduce pressure on outpatient services by moving traditional medical roles to ANPs.

Method: Data was downloaded from the departmental FibroScan® machine for 94 scans and analysed by indication, scan performer and quality of scan. (IQR/m of >25% or n=<10 indicated poor quality). Results were compared throughout three groups, Consultant, Trainee, ANP.

Results: Data are reported on 94 patients (58M/36F, median age 54.14 range 17-86), 31(32%) were above the accepted target of IQR/m <25%. Our ANP (n=59) had a quality rate of 75% compared to Trainee (n=11) with a quality rate of 45% in reliable measurements.. Steathosis grade S3 (65%), XL probe (43%) and marked fibrosis (56%) provided lesser quality scans in total. One consultant performed 24 scans, 59% quality scans, 41% of these deemed technically more difficult. Increased CAP (grade of steathosis), probe size and indication were factors contributing to a more difficult scan.

	ANP	Consultant	Trainee
Total	75%	59%	45%
CAP >280	60%	25%	33%
XL Probe	60%	56.25%	25%
F3-F4	67%	20%	50%

Conclusions: Strongest link to performance quality was user experience. Other factors effecting quality included severity of fibrosis, probe size, disease modality and increased Liver Fat (CAP) score. Our ANP provided a quality service, the scan performance was stable as the complexity of patients increased, suggesting increasing performance delivery. Moving traditional medical roles to ANPs may help service delivery recover in post pandemic times.

Accuracy of Operator of FibroScan®



Progress of ANP

