

The Scarred Liver Project: a new diagnostic pathway to detect chronic liver disease

20
YEARS OF
NICE
1999-2019

The scarred liver project allows GPs to directly access specialist tests to assess for liver damage. In the UK, 50% of patients are first diagnosed with cirrhosis following an emergency admission from the complications of liver failure - resulting in a reduced quality of life, a poor prognosis and expensive associated healthcare costs.

“We completely re-engineered how primary care thinks about liver disease. Liver function tests aren’t the only thing you need to be thinking about.”

Dr Hugh Porter, Chair of Nottingham City Clinical Commissioning Group



What we did and why

Deaths from chronic liver disease in the UK continue to rise, in contrast to cardiovascular disease, respiratory disease and cancer. The incidence is rising in patients under the age of 55.

We have created a diagnostic pathway to detect chronic liver disease early, enabling prompt intervention or early referral to specialist care.

The pathway has three unique features:

1. Identification of individuals exposed to risk factors namely heavy alcohol use, diabetes and obesity.
2. It utilises validated diagnostics to detect and stratify those at risk, replacing conventional liver function tests that have limited accuracy.
3. It creates a more effective interface between primary and secondary care.

The pathway encompasses NICE's *cirrhosis in over 16s: assessment and management* guideline [NG50], but importantly has ambition beyond this – to fundamentally change how liver disease is diagnosed and managed.

Outcomes and impact

The Scarred Liver Project pathway was commissioned and implemented across four Clinical Commissioning Groups (CCGs) in South Nottinghamshire in September 2016. It is now accessible to more than 100 GPs serving a population of 700,000 people.

By following an algorithm, GPs are able to refer patients with a defined risk factor for chronic liver disease directly for a specialised ultrasound test called (Fibroscan®) before considering referral to secondary care.

- 2,751 patients have had a Fibroscan and received a brief intervention (as of September 2018). Of these, 145 patients had a Fibroscan reading of >15kPa which suggests presence of advanced liver disease.
- Economic evaluation has demonstrated that this diagnostic pathway is cost-effective compared to the current standard of care. Once diagnosed, caring for a patient with non-alcoholic fatty liver disease (NAFLD) costs £2,138 per quality adjusted life year (QALY) gained and for alcohol-related liver disease (ALD) it costs £6,537 per QALY gained.

What we learnt

- Pathway design and reiteration is complex and challenging. It requires passionate clinicians that are motivated and credible.
- The co-design of the pathway with stakeholders was critical and allowed adoption at a local level.
- Finding clinical champions within the CCG to help us develop the pathway was key.
- Face-to-face training events for GPs were important. These gave GPs an understanding of what we were trying to achieve, but also provided us with feedback in the initial implementation period.
- The importance of evaluation is accepted but there often isn't the expertise and/or funding to perform this adequately. We were fortunate that our local Academic Health Science Network facilitated both implementation and evaluation of this pathway.
- This project has enabled us to make a radical shift in how we diagnose and manage liver disease in Nottinghamshire.

For more information, visit www.scarredliverproject.org.uk.