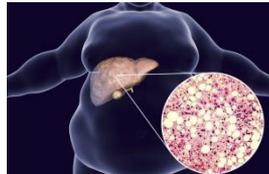


Improving the Detection and Management of Non-Alcoholic Fatty Liver Disease in Primary Care

Dr N. Rogers, Dr P. Kennedy (supervisor), Dr R. McCorry, Dr J.Cash . The Liver Unit ,RVH, Belfast.

BACKGROUND

- Non-alcoholic fatty liver disease (NAFLD) is a lifestyle condition that can lead to chronic liver disease and cirrhosis.
- In Northern Ireland, 7% of all deaths in 2019 resulted from liver disease in adults ages under 65.(1)
- GPs are experts in primary disease prevention and health promotion and manage many chronic diseases.
- However, there has been a lack of focus in primary care on liver disease to date despite the disease burden of NAFLD.(2)



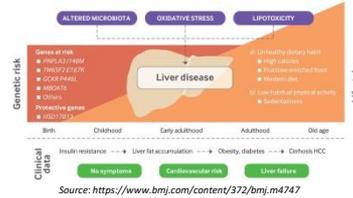
Source: <https://www.tehrantimes.com/news/428147/Fatty-liver-disease-affects-over-30-of-population>

AIMS OF QIP

- The primary aim was to identify patients at high risk of developing NAFLD in primary care using a non-invasive and quick scoring system utilities with "intelligent" iLFT's via the laboratory.
- Enhanced Liver Fibrosis(ELF) testing is the recognised non-invasive test for NAFLD but is not available in NI. We used FIB4 scoring which is recognised in risk assessing Hepatitis C patients for fibrosis.
- The QIP aimed to correctly identify those who required further investigation by fibroscan and appropriate onward referral to secondary care.
- The secondary aim of the QIP was to identify the number of " true positives" by using FIB4 for NAFLD.

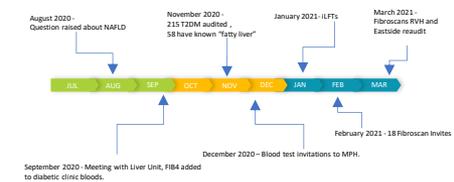
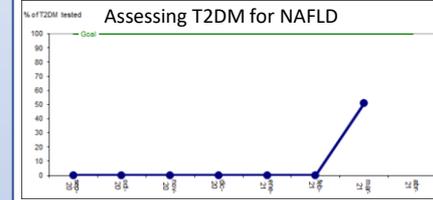
IMPROVEMENT METHODOLOGY

- Eastside surgery has a patient population of 3,000 situated in a lower socio-economic area of Belfast.
- The high risk group were Type 2 Diabetic (T2DM) patients who had known "fatty liver" on previous ultrasound scan. In total, 58 patients were identified which equated to 27% of all the T2DM patients.
- FIB4 scores were calculated through " intelligent "iLFT's i.e. laboratory autogenerating FIB4 scores.



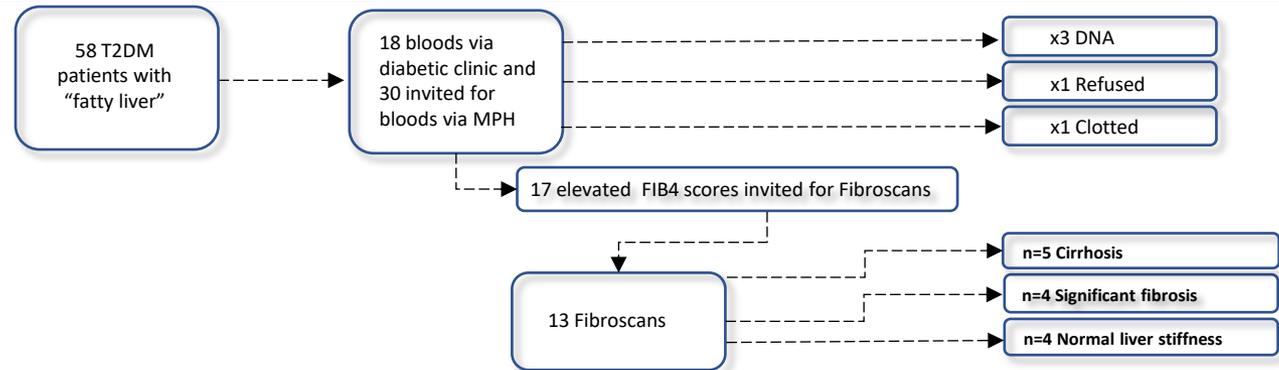
Source: <https://www.bmj.com/content/372/bmj.m4747>

RUN CHART



RESULTS

- Total T2DM patients in Eastside Surgery n=215.
- In September 2020 ,0% of patients in diabetic clinic had been assessed for NAFLD.
- By March 2021, 110 or 51.1% of patients in diabetic clinic had been assessed for NAFLD.
- 58 patients were identified as T2DM with fatty liver. 17 these patients had high FIB4 scores and referred for Fibroscan.
- 13 Fibroscans were completed. Over 64% of patients had significant pathology.



CONCLUSION

- FIB4 scoring is a helpful tool in patients at risk of NAFLD. With the use of iLFT's, at risk patients can be highlighted in primary care.
- Further investigation to understand the sensitivity and specificity of FIB4 is required.

THE FUTURE

- Northern Ireland Regional Liver Network.
- " Intelligent "iLFT's in all Trusts.
- Lifestyle and metabolic medicine clinics in Primary Care.
- Liver health risk assessment in Eastside Surgery diabetic clinics.
- Fibroscans in the community.

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