

# NAFL Camden

14<sup>th</sup> June 2019

Dr Sarah Morgan, GP Hampstead Group Practice and Camden CCG  
Governing Body representative



# Primary /Secondary Care Interface

## Relationships

- 2013 - a **Hepatology working group** was set up
- Camden and Islington with interested consultants, GPs and Public Health doctors and managerial support.
- Focussed on NAFLD and Hepatitis screening.
- Came to an end a few years later but the relationships persist which is the biggest enabler to progressing projects/pathways .....

# Making NAFLD a priority

- Competing priorities
- Clinical areas are often prioritised where financial savings can be realised especially short-term
- Need to persuade people that identifying NAFLD worthwhile and can improve outcomes

# Abnormal LFT Pathway including NAFLD



Camden

Clinical Commissioning Group

- Created in 2013, revised 2016 and 2019
- Pathways only work if implemented and followed- our enablers included:-
  - An excellent established Camden GP website which includes a repository for 50 local pathways. Abnormal LFTs 2<sup>nd</sup> most popular pathway with >1500 hits/month
  - A referral management centre – that signposts clinicians to the pathway when relevant
  - The hepatology group GPs – raising awareness through various borough wide communications
  - Reinforced through various educational opportunities
  - Royal Free London's evaluation of the pathway including uptake
  - GP induction programme

# RFLH - Prospective evaluation of a primary care referral pathway for patients with non-alcoholic fatty liver



Camden

Clinical Commissioning Group

Evaluation of 3012 patients across Camden and Islington

## Key findings

- 80% reduction in unnecessary referrals
- 5 fold increase in detection of advanced fibrosis
- 3 fold increase in detection of cirrhosis
- Savings of £150k from referrals avoided

## Adult Abnormal Liver Function Tests Guidance

This guidance has been developed in collaboration with local specialists in Camden and Islington. This is to assist GPs in decision making and is not intended to replace clinical judgment.

### Consider doing LFTs

- if sx of liver/bile system disease e.g. abdo pain/nausea/vomiting/jaundice/fatigue/anorexia
- pt drinks excessively
- pt taking medication that affects the liver
- pt has diabetes or other metabolic disorder
- obesity
- GGT – useful in cholestasis or monitoring changes in alcohol consumption

**Jaundice (Bil>40)**  
**Significantly abnormal LFTs**  
**Concerns re ↓albumin or prolonged INR**  
**Suspected hepatic or biliary malignancy**

**Patient has Abnormal LFTs:**  
**History and Examination with attention to Alcohol consumption, Metabolic Syndrome, BMI, Hepatotoxic Drugs & Risk factors for Viral Hepatitis**

**Isolated Raised Bilirubin with other normal LFTs**

**Normal Bilirubin with Hepatitic LFTs (ALT>ALP)**

**Normal Bilirubin with Cholestatic LFTs (ALP>ALT)**  
Liver aetiology suggested by ↑GGT otherwise consider bone aetiology and check Vitamin D)

Please note - LFTs are normal in up to 25% patients with cirrhosis. If a patient drinks at harmful levels (♂ >50 /wk ♀ >35u/wk) or has a full AUDIT score >7 – please do an us scan liver (refer if appropriate) and ELF test referring if >10.5

**Urgent Ultrasound and/or Urgent 2 week referral to secondary care or admission**

Most commonly due to Gilbert's syndrome (unconjugated hyperbilirubinaemia - affects 5% of the population and is benign)

Less commonly due to haemolysis

Repeat LFTs fasting sample with split bilirubin and FBC. Consider reticulocytes and LDH if haemolysis suspected. If Gilbert's confirmed then inform patient and provide [information](#)

**Manage in Primary Care:**  
**Lifestyle advice and repeat LFTs in 1 year**

Isolated raised LFTs but normal USS and Panel

**ALT<300 IU/L**

Repeat within one month with AST, GGT, FBC to confirm still elevated

Consider HCV and HBV

If alcohol consumption >14U/Week advice and consider [referral to alcohol services](#)

If abnormal

Ultrasound & request Extended Liver Test Panel: which includes

- Hepatitis B & C
- Autoantibodies
- Ferritin / Transferrin satn
- Caeruloplasmin
- Immunoglobulins
- A1 antitrypsin
- also HBA1c

**Fatty Liver Suggested by USS and Extended Liver Test Panel Negative for other Pathology**  
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**ALT>300 IU/L**

**Seek telephone advice and consider urgent tests**

USS normal

Abnormal USS appearances and/or Abnormal Liver Test Panel

USS abnormal

**Refer to Liver Specialist for possible:**

- Viral Hepatitis
- ALD with Advanced Fibrosis
- PSC, PBC, Autoimmune Hepatitis
- Gallstone disease
- Hepatic Vascular Disorders
- Hepatic Metabolic Disorders

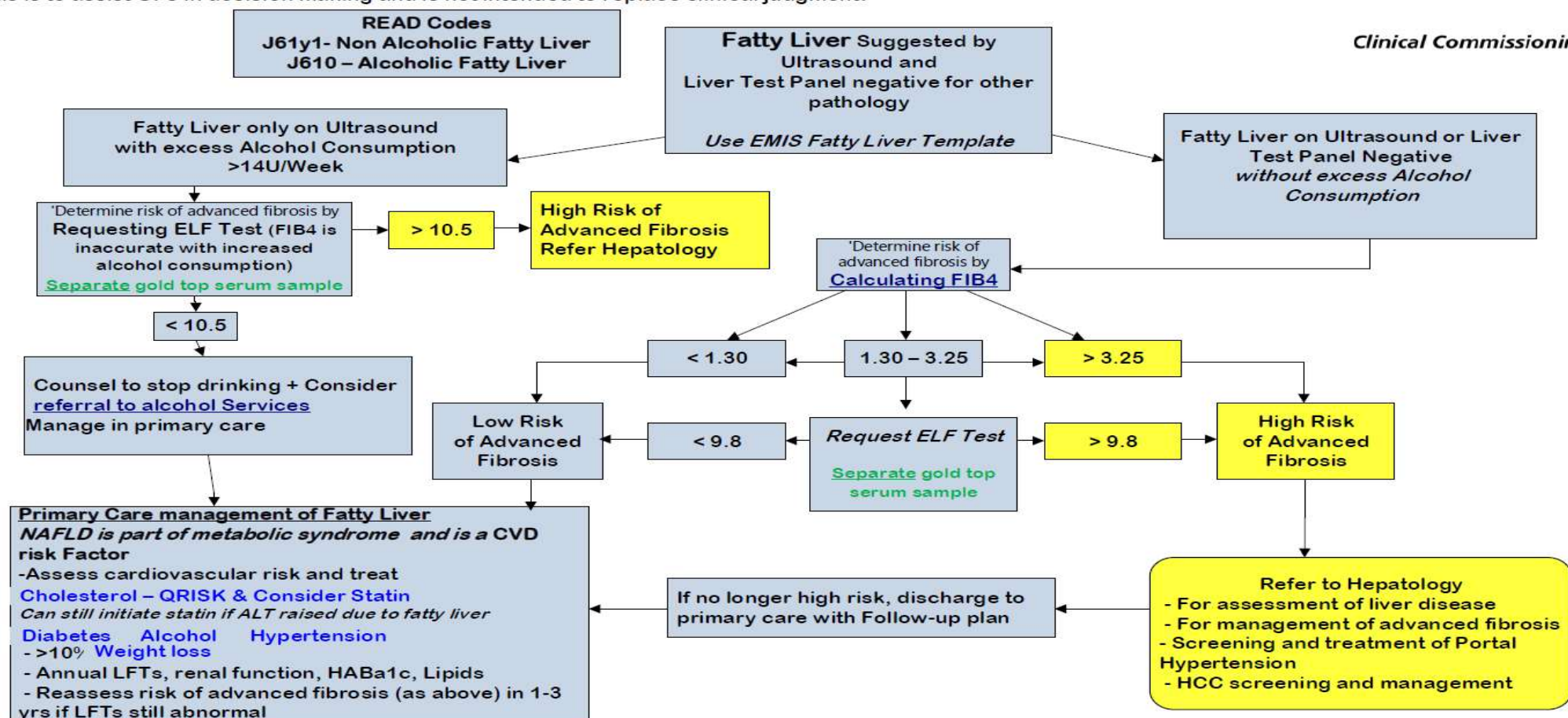
**Consider [urgent referral](#) pathway for suspected Hepatic and Biliary Malignancy**

Pathway Created Dec 2013  
Reviewed Feb 2016 and Feb 2019  
Next Review Due Feb 2022



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### References

Fibrosis stratification in NAFLD based upon:

FIB-4 McPherson S et al. Gut. 2010 Sep;59(9):1265-9. FIB4: (age [yr] x AST [U/L]) / ((PLT [10<sup>9</sup>/L]) x (√ALT [U/L]))

ELF: Enhanced Liver Fibrosis Test Rosenberg et al. Gastroenterology. 2004 Dec;127(6):1704-13.

Combining ELF and FIB4 in NAFLD Tanwar et al. HEPATOLOGY. 2012; 56, 264A.

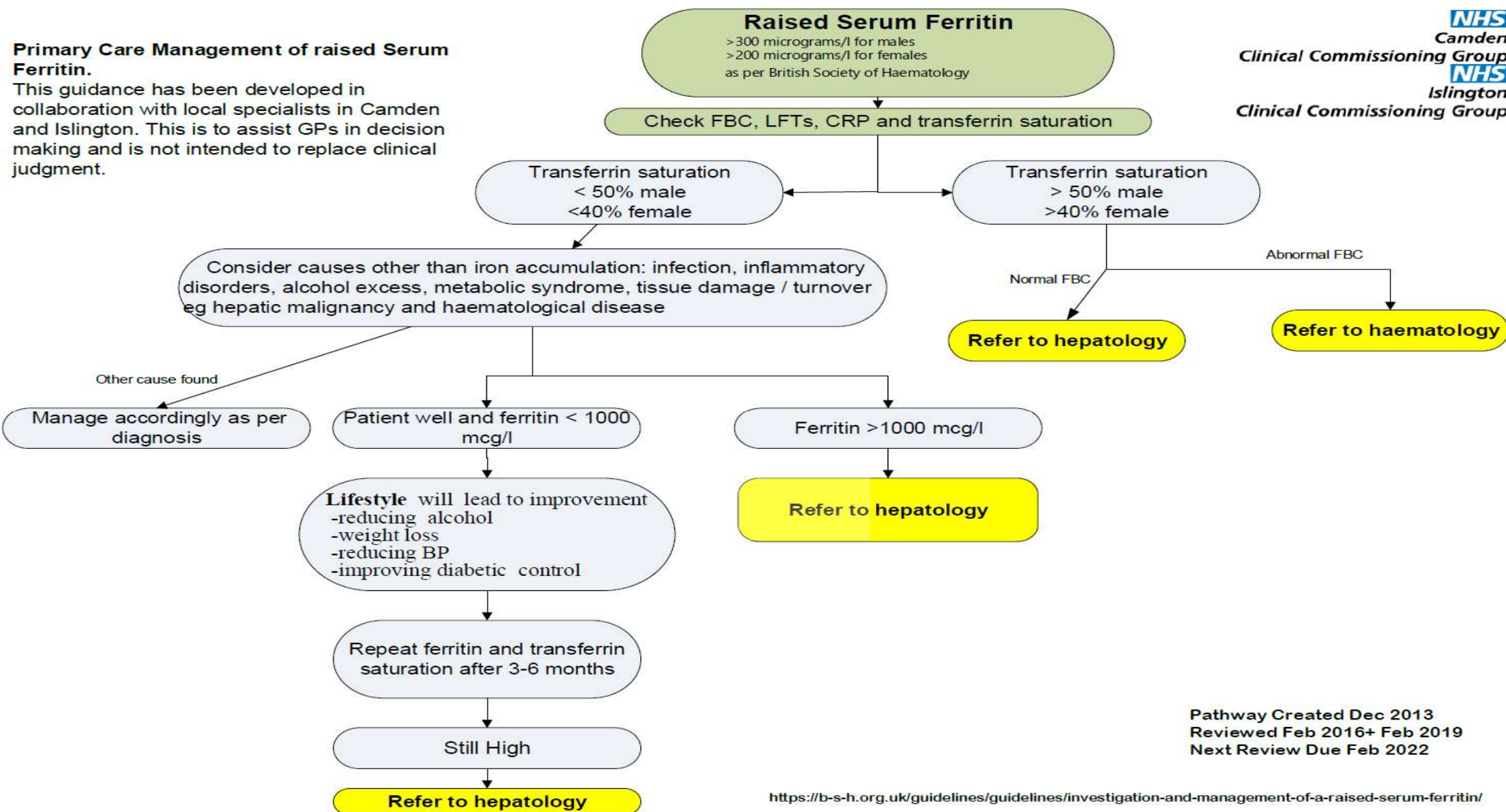
Pathway Created Dec 2013 Reviewed Feb 2016 +2019

Next Review Due Feb 2022

Clinical contact for this pathway: Prof William Rosenberg [william.rosenberg@nhs.net](mailto:william.rosenberg@nhs.net)

## Primary Care Management of raised Serum Ferritin.

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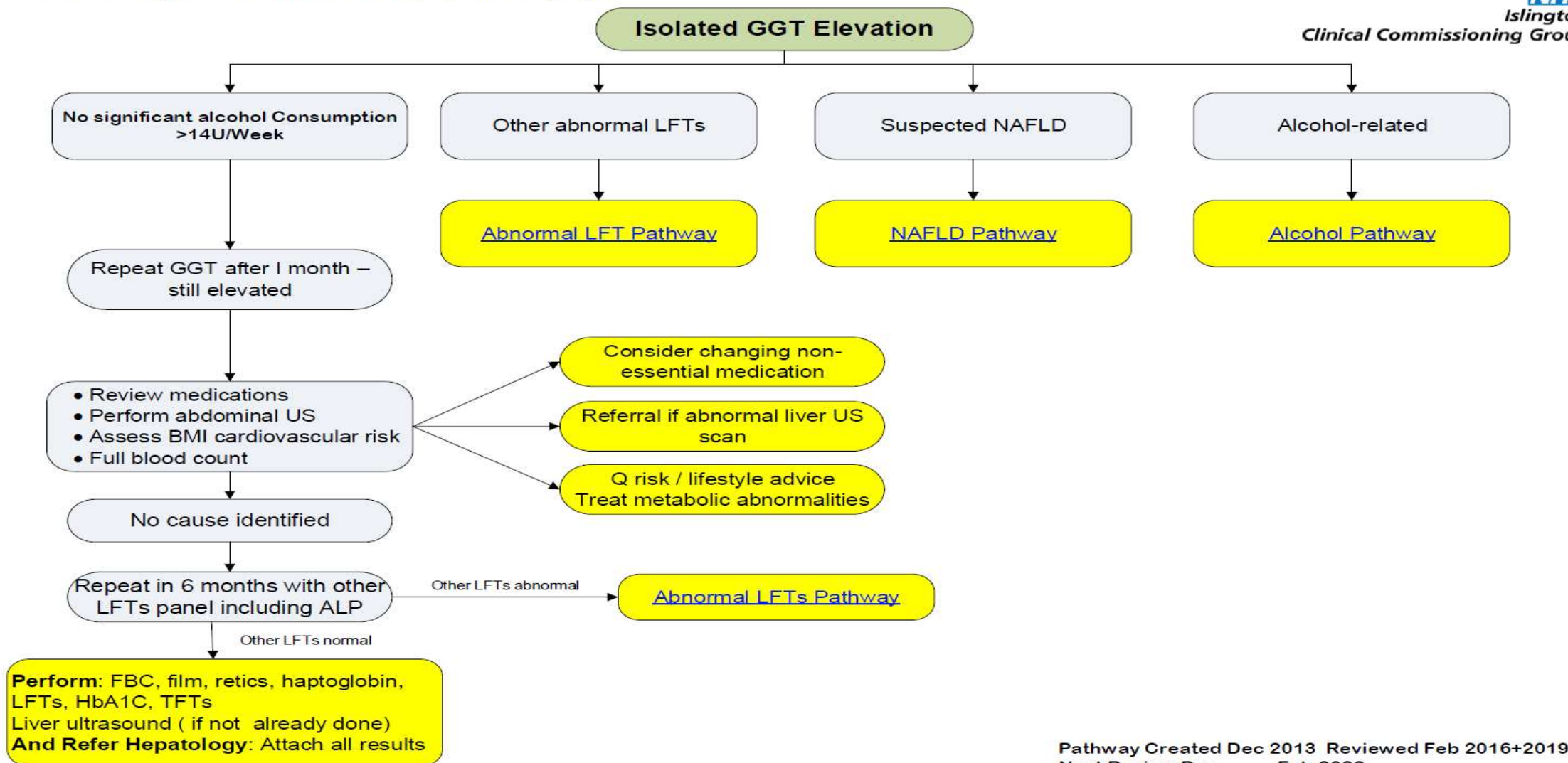


Pathway Created Dec 2013  
Reviewed Feb 2016+ Feb 2019  
Next Review Due Feb 2022

<https://b-s-h.org.uk/guidelines/guidelines/investigation-and-management-of-a-raised-serum-ferritin/>



**Primary Care Management of elevated serum GGT.** This guidance has been developed in collaboration with local specialists in Camden and Islington. This is to assist GPs in decision making and is not intended to replace clinical judgment.



# Questions ????