Scotland Audit Group Bulletin

Liver function tests

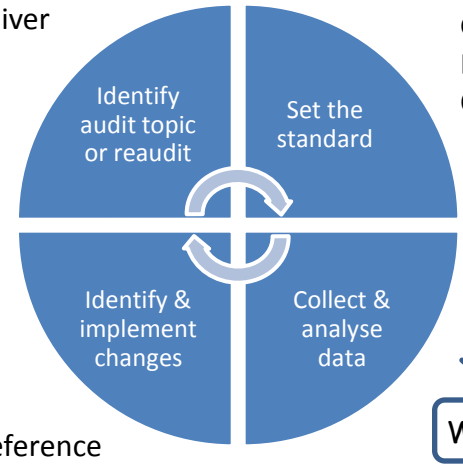
Audit lead: Dr J Malo

Which area did you audit and why?

- Several biochemical tests are useful in the evaluation and management of liver disease
- The aim of this audit was to provide a picture of current laboratory practice with respect to blood and urine liver function tests (LFTs) in Scotland
- We audited this in Nov 2017

What were the audit standards?

- Pathology Harmony reference ranges
- American College of Gastroenterology Clinical Guideline: Evaluation of Abnormal Liver Chemistries, 2017



What are the next steps for laboratories?

- Consider revising down upper reference limits, especially for ALT, following discussion with local gastroenterologists
- Consider implementation of fibrosis risk scores where there could be clinical and economic benefits
- Where iLFTs in being piloted, share best practice and 'lessons learned' to enable smarter uptake across the region

What key things did you learn?

- Standard LFT profiles, and tests for the further investigation of liver disease or particular LFT derangements, are broadly similar
- Few laboratories perform reflex testing (e.g. conjugated bilirubin, AST or GGT)
- There is variation in reference ranges, especially for GGT and LDH
- One laboratory uses lower upper reference range limits for ALT and AST, which is the direction of travel according to several recent studies
- Only one Health Board is reporting a fibrosis risk score (FIB4) whereas all laboratories offered a serum biomarker
- One Health Board has piloted laboratory-based liver disease risk scores ("intelligent LFTs") while a further 2 are considering implementation
- A limitation of this audit was that only 7 out of 14 Health Boards returned a questionnaire

For more details: http://www.acb.org.uk/whatwedo/science/audit/audits-by-group/scotland-audit-group