

Scotland Audit Group Bulletin

Pancreatic enzymes

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Which area did you audit and why?

- Clinical features, together with elevation of pancreatic enzymes, are the key diagnostic indicators of acute pancreatitis
- Serum amylase is the most commonly measured enzyme in the UK due to the availability of cheap automated methods but it lacks specificity for the pancreas
- Lipase may be a better marker but anecdotally, it is less popular
- We audited this area in March 2016

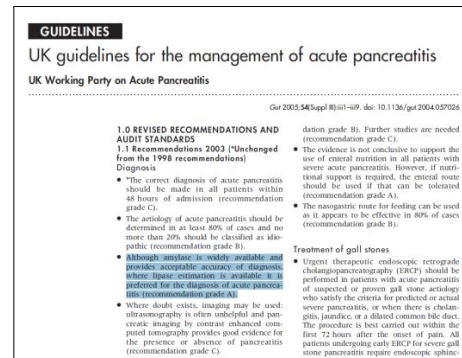
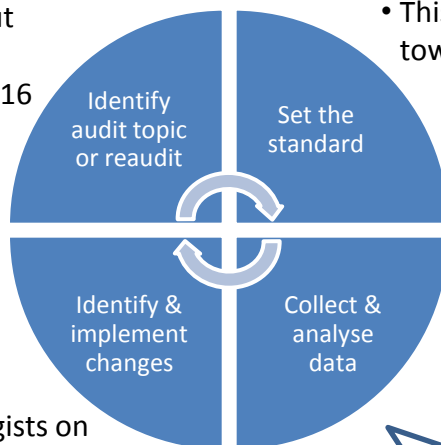


What were the audit standards?

- British Society of Gastroenterology Guidelines For The Management Of Acute Pancreatitis, 2005
- This guideline suggests a preference towards lipase measurement

What are the next steps for laboratories?

- Engage with local gastroenterologists on which test(s) are required and develop better clinical guidance
- Consider cascading more specific tests (especially lipase which is available at QEUH, Glasgow) where there is diagnostic confusion
- Review telephoning limits in line with RCPATH guidance
- Consider harmonising ACCR reference ranges



What key things did you learn?

- Very few are aware of local guidelines regarding testing in cases of suspected acute pancreatitis
- Most laboratories offer serum amylase rather than lipase
- Very few cascade more specific tests (e.g. lipase, amylase isoenzymes) where there might be diagnostic confusion
- There is little consensus regarding alert and telephoning limits for serum amylase but generally close agreement of reference ranges
- Most laboratories offer urine and fluid amylase however there is wide variation in workload, turnaround time, reference ranges and cost
- Only a few laboratories report amylase:creatinine clearance ratio (ACCR) and none offer direct macro-amylase testing

