**Audit Method and Outcome(s):**

**To review all potassium results greater than 6.5 mmol/L (defined as limit requiring urgent clinical action in the Royal College of Pathologists advice on out-of-hours reporting) for the month of September 2015.**

**The audit standards used to determine acceptability of outcome are:**

1. That potassium results greater than 6.5 mmol/L should be communicated urgently, with the caveat that if the patient is known to the department and has a similar result within the previous seven days, result may not need urgent communication. (Royal College of Pathologists advice on Out-of-hours reporting of laboratory results).
2. That if results are not communicated, the reasons why they have not been reported are documented (Royal College of Pathologists, Key performance indicators, Proposals for Implementation)
3. That 97 % of critical results are communicated within 2 hours of the result being available (Royal College of Pathologists, Key Performance Indicators in Pathology).

Additional findings reviewed:

1. Whether there are differences between timeliness of reporting between 9 to 5 pm weekday service and other times.
2. Whether laboratories comply with advice from Royal College of Pathologists directing that results phoned out-of-hours services should also be phoned to the GP patients surgery at the first opportunity within normal working hours. (Royal College of Pathologists advice on out-of-hours reporting of laboratory results).
3. What exclusion criteria laboratories apply to the reporting of potassium ie what time frame does the laboratory define as delayed separation, what are practices for reporting of haemolysed and EDTA-contaminated samples

**Combined audit and survey questions**

1. What percentage of all potassium results greater than 6.5 mmol/L, irrespective of time potassium result was available, were telephoned to clinical users (with the caveat that if the patient is known to the department and has a similar result within the previous seven days, result may not need urgent communication)? How many actual potassium results does this equate to?
2. Of all the potassium results telephoned, what percentage were telephoned within 2 hours of the result being available?
3. Of the results not communicated, what percentage and number on review should have been phoned?
4. Of the results not telephoned, what percentage had the reason why they were not communicated documented? Please state whether it is your departmental policy to document the reason for a critical result not being phoned.
5. Which staff groups at your health board telephone potassium results and if multiple staff groups, over which time periods are they involved in communicating results (eg Clinical Scientist 09:00 to 20:00, BMS 20:00 to 09:00)?
6. If your Health board operates different reporting practices at multiple sites (eg site A has potassium results communicated by clinical scientist/medic between 09:00 and 17:00 and BMS outwith those hours and site B has potassium results communicated solely by BMS staff), what percentage of potassium results were reported within two hours at each site where practice varies?
7. What percentage of telephoned potassium results available during standard GP surgery working hours (09:00 to 18:00) were communicated within two hours? What percentage of results available outwith these times were communicated within two hours?
8. Please state how your health board communicates critical results for Primary care patients once their GP surgery is closed. Are these results routinely phoned to the requesting location at the first opportunity the next working day?
9. What are your protocols for acceptance/rejection of potassium results due to time delay/contamination? Please include SOPs and if available, evidence base.
10. What are your protocols for acceptance/rejection of potassium results due to Haemolysis? Please include SOPs and if available, evidence base. Please state whether your laboratory uses automated serum indices for the assessment of haemolysis. If so, please state the manufacturer, instrument(s) and cut-offs used ie indice level equating to slightly haemolysed, haemolysed, grossly haemolysed etc. If your health board operates over multiple sites and processes are different at different sites (eg due to analytical equipment differences), please include information for all analytical platforms/sites.