Troponin testing in Primary Care

Troponin is a cardiac structural protein released during myocyte injury. Two of its subunits can be measured to indicate myocardial damage: Troponin I and Troponin T. The labs at York and Scarborough provide Troponin T.

**DO NOT request troponin in Primary Care / Community:**
- If the patient has suspected acute coronary syndrome (ACS) with chest pain >15 minutes duration – **dial 999**
- If the patient has had symptoms suggestive of ACS within the past 72h – **urgent assessment in ED required**
- If the chest pain is non-cardiac

**The Universal Definition of MI requires:**
- Rise or fall in cardiac troponin with 1 value above the 99th centile **AND** relevant ECG changes **OR** symptoms of ischaemia
- The 99th centile for Troponin T is 14ng/L. This means that 99% of healthy individuals will have a Troponin T <14ng/L.

**Troponin T results must be interpreted in light of the clinical presentation.**

- If hs Troponin T <5ng/L ACS is excluded if >3hr post chest pain
- If hs Troponin T 5-14ng/L ACS is unlikely if >3hr post chest pain
- If hs Troponin T 14-51ng/L Discuss with cardiology/ambulatory care
- If hs Troponin T >51ng/L Further assessment in ED usually required

The laboratory will phone primary care Troponin T results >14ng/L to either GP surgery or GP out of hours service.

Some Non-Cardiac causes of elevated hs Troponin T in the absence of an MI:
- Pulmonary Embolism, Renal Failure, COPD, Diabetes, Acute neurological event, Drugs/Toxins

Non-acute elevations in hs Troponin T >14ng/L - seek Cardiology advice