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Webinar

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Strategies to Improve Turnaround Times of Troponin Requests in a District General Hospital Acute Medical Unit

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Statement of the Problem:

The results of troponin requests play an essential role in initiating the management of NSTEMI, particularly in the clinical setting of atypical or non-cardiac sounding chest pain with an intermediate-to-low pretest probability of ischaemic heart disease in accordance with the current NICE guidelines. In a busy acute medical setting with resources at a premium, the delay in obtaining a troponin result leads to the diagnosis of ACS being deferred with subsequent treatment delays and its associated complications. Clinical Practice: A quality improvement project was conducted in Prince Philip Hospital, Llanelli in Wales with a NICE guideline standard of reference of troponin turnaround time being less than 60 minutes. The results of the baseline analysis conducted over a three month period revealed only 49.5% of troponin results available in under an hour of the blood sample being taken. Over the course of the subsequent PDSA cycles, a number of interventions were performed. Out of these, efforts were aimed at the most limiting step which was the time taken for the sample to reach the lab. Involvement of the staff in acute medical unit and coming up with solutions to reduce the time taken to draw the blood sample and its subsequent transportation demonstrated improvement in troponin turnaround times on re-auditing.

Conclusion & Significance:

Regular monitoring of troponin turnaround times with involvement of all the stakeholders including the physicians, nurses and allied

healthcare staff involved at all stages of the process of obtaining a troponin result in a multi-disciplinary fashion is paramount to ensuring timely diagnosis and initiation of treatment for acute coronary syndromes.

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