



Well done if..... Wells (score) done!

Improving implementation of Wells score for suspected VTE

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Introduction

The new National Institute for Clinical Excellence (NICE) guidelines for venous thromboembolism (VTE) diagnosis and management was updated and published online in 2021¹. It highlights the use of a clinical prediction rule (2-level Wells score) prior to requesting a D-dimer test or a relevant radiological investigation when a clinical suspicion of VTE is made. When a Wells score suggests VTE is 'likely', urgent imaging (proximal leg vein ultrasound scan for DVT or computerised tomography pulmonary angiogram (CTPA) for PE) should be arranged via secondary care if result can be obtained within 4 hours. If the Wells score indicates that VTE is unlikely, then a D-dimer test is requested providing the result can be obtained within 4 hours. In the setting where a D-dimer result cannot be obtained within the required time limit, interim therapeutic anticoagulation is offered.

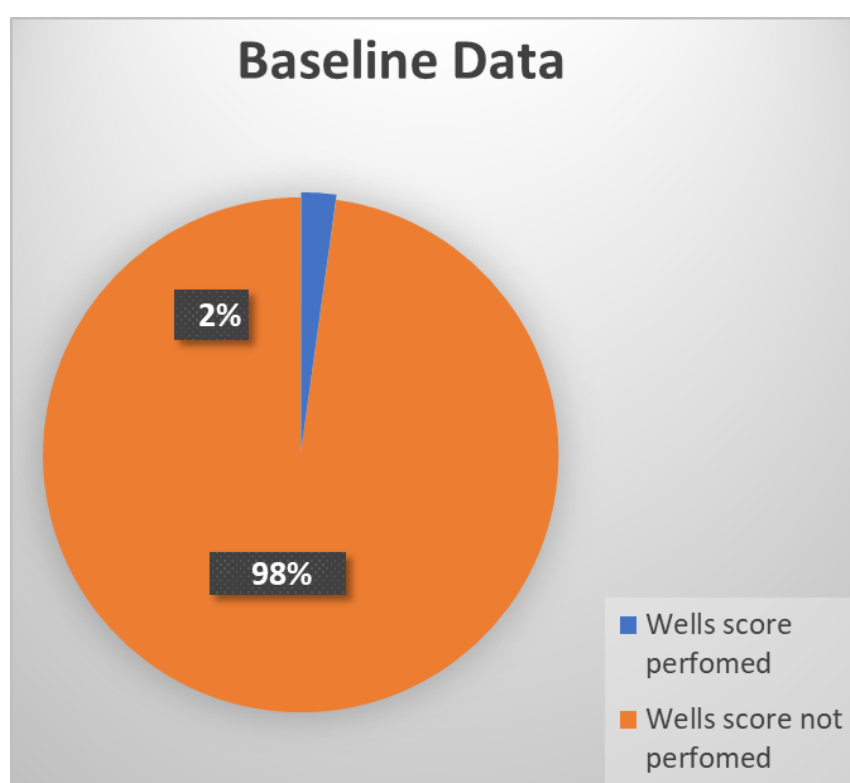
The project team identified that the D-dimer test was being requested in admission areas as a routine initial blood test prior to calculating a Wells score and irrespective of whether the patient had been clinically identified as a potential VTE case. In accordance with the new guidelines, the focus of the project team was to apply a 2-level Wells score to guide further investigation and mitigate the avoidable risk of prescribing interim therapeutic anticoagulation along with the burden of cost associated with carrying out unnecessary investigations and a prolonged length of stay.

Aim

To improve compliance with NICE guidelines regarding appropriate application of the Wells' score prior to D-Dimer testing over time and ensure that all suspected patients with PE or DVT have a Wells' score calculated following admission.

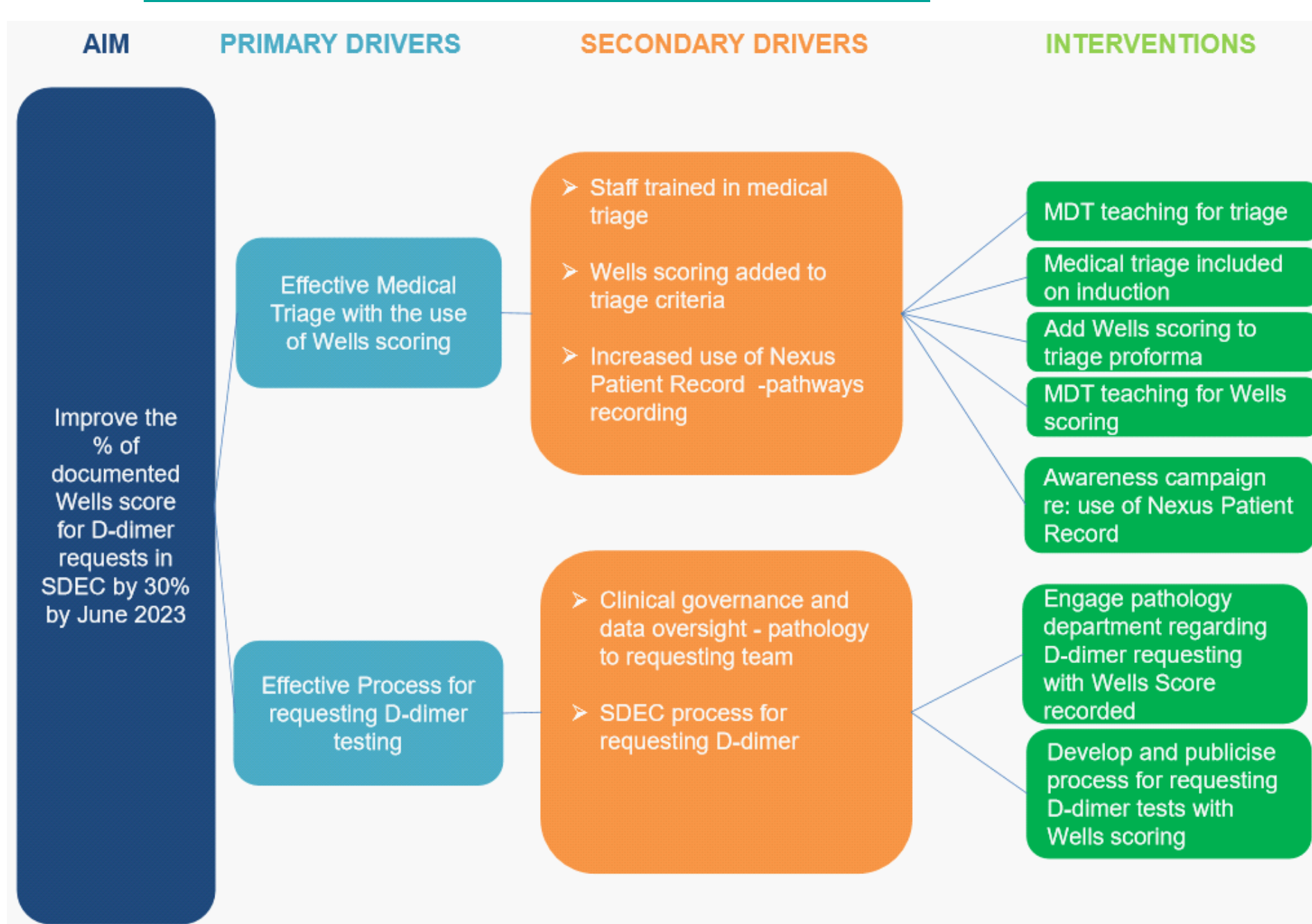
SMART Aim: To improve the percentage of cases with a documented Wells' score for D-dimer requests in Same Day Emergency Care (SDEC) by 30% by June 2023

Initial Assessment

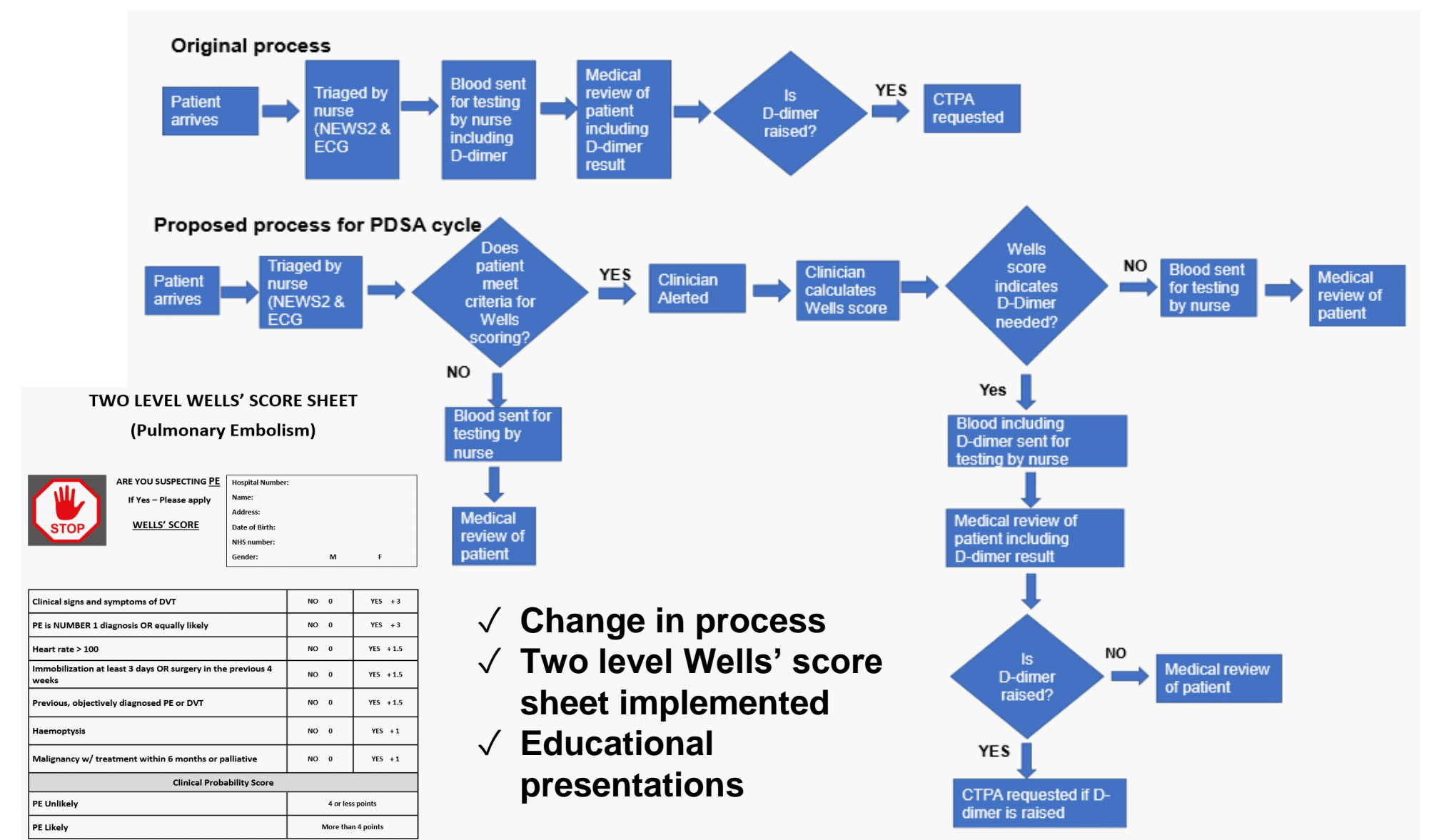


A review of 89 cases identified that D-dimer tests were being ordered without consistent Wells' score completion (2 out of 89 cases reviewed had Wells scoring) suggesting D-dimer tests were being utilised in assessment areas as a screening tool without consideration of suspicion of VTE. This practice can increase the number of unnecessary radiological tests which impacts on patients length of stay and their experience. In addition this has financial implications for the Trust.

Driver Diagram

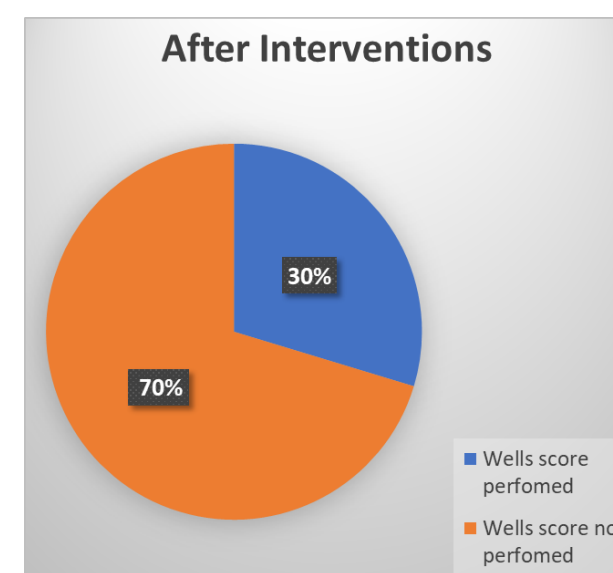


Plan Do Study Act (PDSA) Cycles



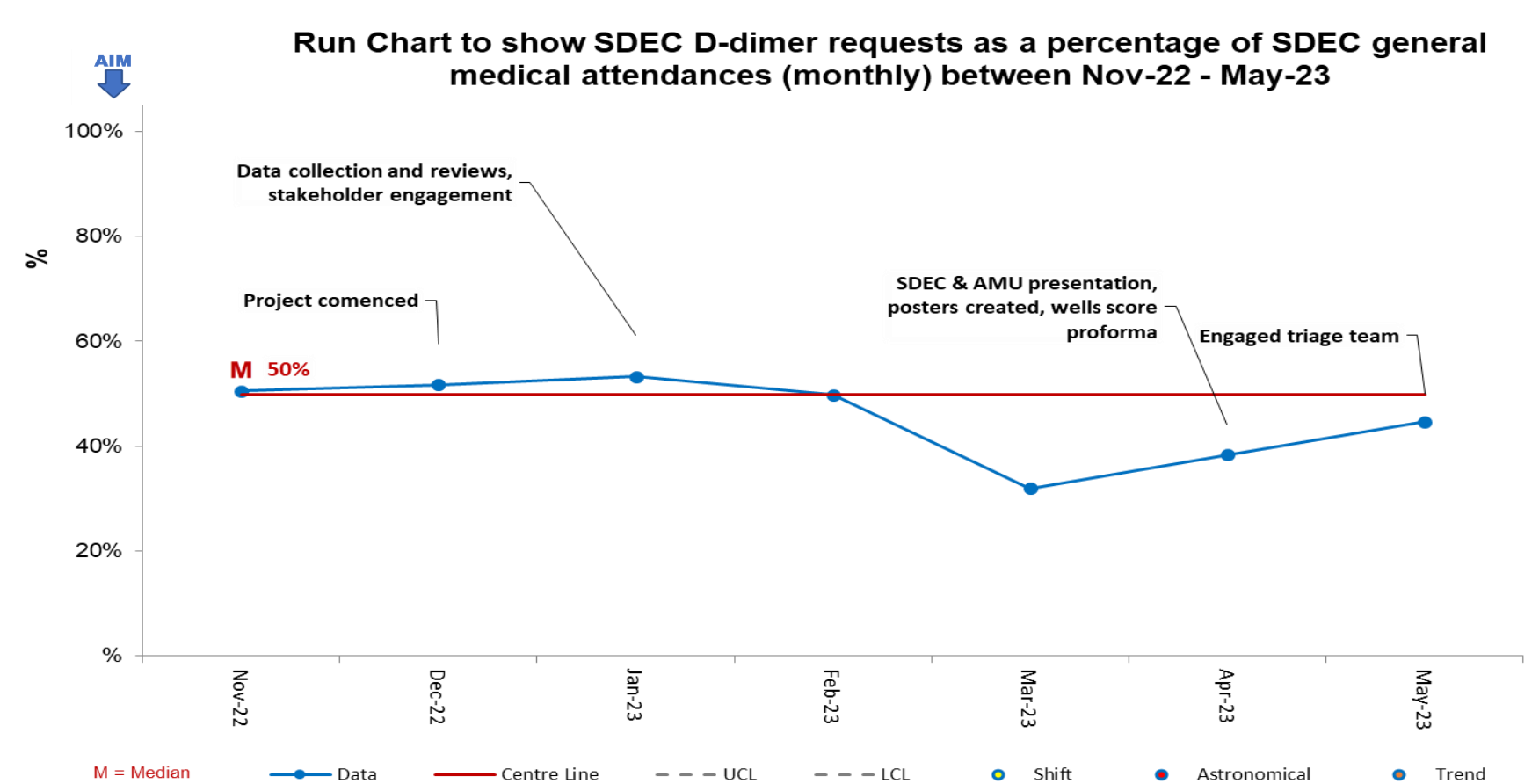
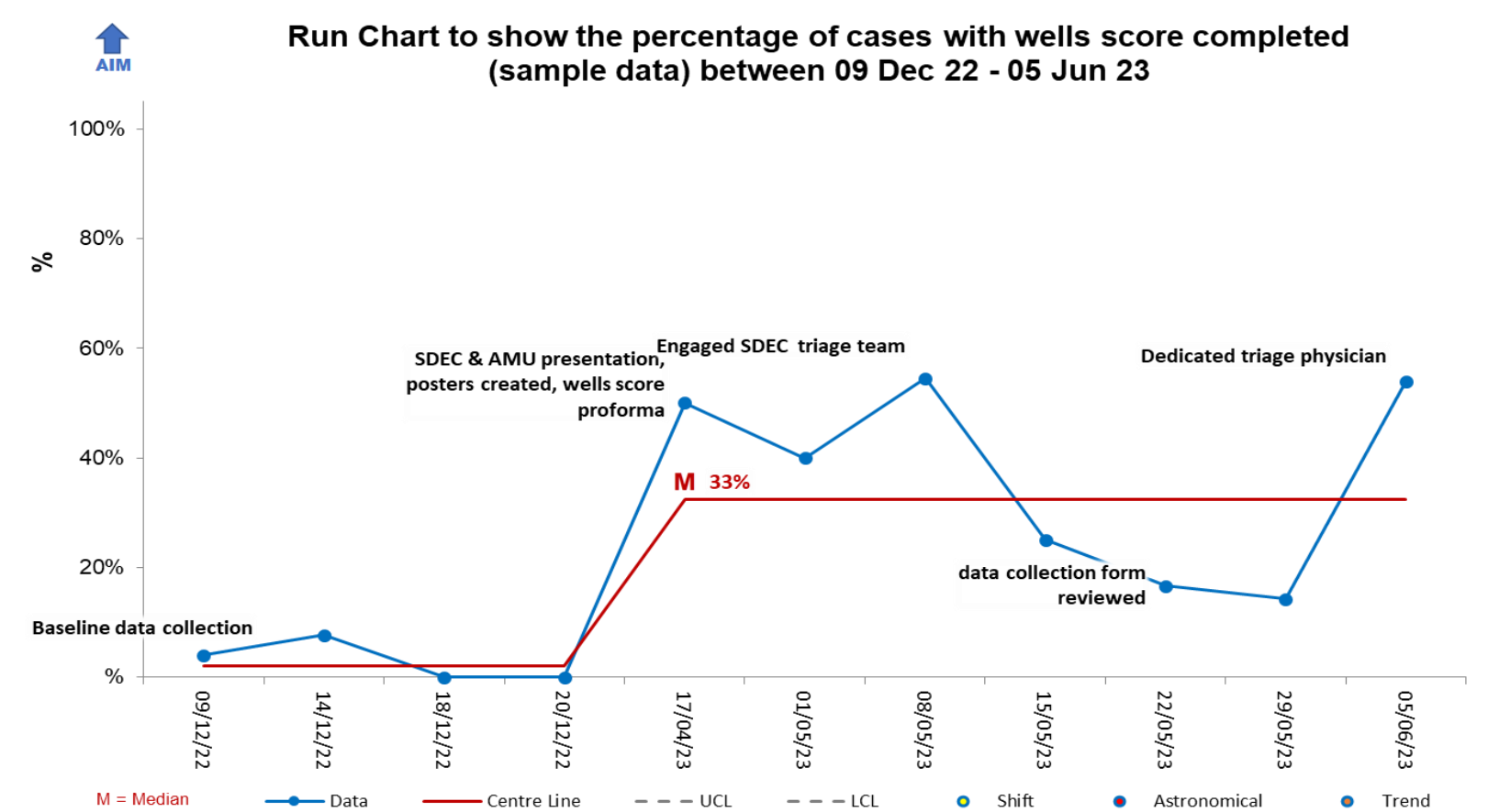
- ✓ Change in process
- ✓ Two level Wells' score sheet implemented
- ✓ Educational presentations

Results



The project identified an improvement up to a median 33% (weekly sample data) of SDEC cases reviewed had Wells' score documented.

To monitor the impact on D-dimer requests this data is also presented in a run chart as a percentage of SDEC medical attendances.



Lessons Learned & Sustainability

Changing processes and working practices within healthcare settings can be challenging, it requires continuous engagement with stakeholders and support from senior management. It is important to regularly collect data to identify whether changes made have had an impact and consider sustainability from the start of the project. Next steps include additional awareness raising activity and expanding the project to other assessment areas.