

Case study

Point of Care Device has a big impact in Same Day Emergency Care .

The Same Day Emergency Care (SDEC) team at the Western General Hospital can now speed up access to results for blood clotting problems thanks to funding from NHS Lothian Charity. Previously, identifying blood clots in patients was a slow procedure. Where the risk of blood clots was increased, medication was given to reduce the risk until the results came back to decide the course of action. However, the Lumera Point of Care Device that the team has piloted is helping to quickly and non-invasively detect veins and blood clots in patients.



Approximately 2,000 patients within a 6-month period benefitted from the use of this device. It has impacted in the following ways.

Improved patient experience

Reduced waiting time for support means patients are exhibiting less signs of stress and distress and an improved environment for staff to detect deteriorating patients. Staff in the department feel that patients have a better experience, and the team are able to provide a more efficient service to patients.

One of the staff members gave an example "If a patient arrives in the department at 6pm, radiography and scanning departments are closed. We can now do the test and give the appropriate advice all before we close at 8pm. Prior to this the patient would have gone back to a ward and stayed overnight until the labs opened in the morning."

Improved clinical outcomes for patients

By quickly identifying the location and severity of a blood clot, doctors can begin treatment sooner and with greater precision, cutting out the potential need for unnecessary medication and potentially saving lives. 10 more patients a day can be attended to which means more patients can be admitted from the main Emergency Department, helping to ease the burden on this department and it's staff.

Dr Rachel Sutherland explained, "This also had a knock-on effect regarding patient scanning, giving the department more lead time to allocate an available ultrasound, improving the likelihood of same day scanning." Another example of less waiting time for patients.

Improved staff health and wellbeing

Staff reported to be feeling more valued as result. A Clinical Support Worker from the department told us "I have worked in this department for a long time (and prior to the device being used), I have seen a difference in the morale of everyone. Happier patients equals happier staff!"







Improved knowledge and understanding of effective treatment and practice

The impact of using the device has been further felt by staff. Dr Rachel Sutherland explained "Multiple staff members were given the opportunity to expand their skills regarding the use of the Point of Care Device. Clinical Support Workers responsible for performing the tests have had the opportunity to gain knowledge."

Other impacts

This test can limit the need for patients to receive some medications resulting in a significant reduction in spend for the department.

The department were recognised by other professionals with an invitation to speak at the Thrombosis UK Conference 2023 and produced multiple poster submissions.

What's next for the department

The team now use this device on a daily basis and with the current expansion plans for SDEC and the increased number of patients directed from other NHS Lothian areas more patients will benefit from the use of this point of care test. The department also hope to use the device to test levels of troponin which indicates damage to the heart, allowing doctors early indication and potential prevention of heart attacks.

Thanks to further funding from NHS Lothian Charity, the SDEC team created an online patient experience survey which is monitored and analysed. Responses from this then give the team evidence to implement a number of other initiatives across the department.

Thanks to funding from NHS Lothian Charity, the department are also introducing TV's for waiting rooms. Patients get anxious about waiting times, the TV's will broadcast live times and show other important patient information. This will ease distress in patient waiting areas and free up staff time. One staff member in the department explained "It is part of my role at the moment to check our database and then update patients in waiting rooms of waiting times, when this is automatically displayed on the TV's it will free me up to see more patients."

Further funding from NHS Lothian Charity has paid for Patient Information Display Units, which will be displayed on walls in patient areas. This will allow patients to easily help themselves to written information relevant to their condition. This will help increase patient knowledge and free up staff who currently hand out the leaflets.



Our patient information leaflets include advice on medication, as well as recovery and best practice on how to manage their condition. By being more informed, and following a patient centered care model, clinical care improves as a result."

Dr Rachel Sutherland

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