

## AQT90 FLEX Case story

Shorter TAT, better processes and faster treatment in the Accident & Emergency Department

### Customer details

<b>Name of Trust:</b>	Buckinghamshire Hospitals in England
<b>Location:</b>	Stoke Mandeville & Wycombe Hospitals
<b>Name of department:</b>	Accident & Emergency Department (A&E)
<b>No. of beds:</b>	approx. 450 (150 'flexi' beds)
<b>No. of admissions each year:</b>	approx. 100,000 in both hospitals
<b>No. of AQT90 FLEX instruments:</b>	1 per hospital
<b>Parameters measured:</b>	Troponin I, D-dimer
<b>No. of tests:</b>	50 per week per hospital
<b>Contacts:</b>	Mr Esa Rintakorpi, Clinical Nurse Lead



### Shorter turnaround time with the AQT90 FLEX

Before installing the AQT90 FLEX in its two Accident & Emergency Departments (A&E), D-dimer at the Buckinghamshire Hospitals was solely measured in the lab and with the caveat that no measurements were done after 4pm. The lab also did not measure D-dimer on patients that were more than 65 yrs old.

"Before installing the AQT90 FLEX what used to happen was the patient would have the blood sample taken and then sent to the lab," says Mr Esa Rintakorpi, Clinical Nurse Lead at Buckinghamshire Hospitals. "A&E would then have to wait for the result before being able to confirm a DVT/PE and send patient for a CT scan." According to Rintakorpi, that process would typically take 2 hours. "Now we can take the sample, run it on the AQT90 FLEX and 20 minutes later, when the results are ready, a CT scan can be ordered immediately, if necessary. That's a great time saving," he concludes.

### Reduction in unnecessary treatments

There is no out-of-hours lab service to process D-dimer tests, so as a rule, the A&E use their AQT90 FLEX from 5pm through to 9.30am, or when exceptional numbers of admissions warrant its use. The lab has some downtime each morning while they calibrate and quality control their measuring systems, therefore samples are not usually sent before 9.30am.

There is also no D-dimer testing in the lab for patients more than 65yrs old, as they predict that the D-dimer will be higher. The A&E departments use their AQT90 FLEX in those cases and ensure that they are ruling-out patients accurately and not giving unnecessary treatments.

### Better processes and faster treatment with the AQT90 FLEX

Being able to test TnI and D-dimer at the point-of care with the AQT90 FLEX has led to tightened local policies regarding further treatment and/or assessment of patients at the Stoke Mandeville & Wycombe Hospitals.

The hospitals now have a new patient pathway based upon risk stratification, which has improved the effectiveness and efficiency of their services. A *risk 'score'* determines the course of patient treatment. With the AQT90 FLEX, now even very low-risk cardiac patients, possibly with a negative TnI on admission, get followed-up through the Rapid Access Clinic 5-7 days later. D-dimer risk is based upon Well's scoring.

Having the AQT90 FLEX has contributed to A&E department to reach its goal that no more than 2% of patients should wait more than 4 hours to be treated. So far in 2010 the percentage is under 1.4%.

**"Our AQT90's have absolutely highlighted the need for good processes within the hospital"**

Esa Rintakorpi