



Elisabeth-Tweesteden Ziekenhuis,
Netherlands

“The expectation is that the combination of a fast, dedicated sample transport and total laboratory automation, will significantly improve turn-around-time, especially on urgent blood samples from the Emergency Department”

Bob Wieggers, Head of the laboratory, Haematology and Chemistry

Targeted initiative to optimise the transport of blood samples

In 2015, the famous Dutch Hospital Elisabeth-Twee Steden Ziekenhuis (ETZ), Tilburg, considered introducing full laboratory automation in the hospital laboratory. In 2012, the hospital's supplier Siemens Nederland, had already identified the Tempus600 solution as an efficient way of transporting blood samples to the laboratory. Bob Wieggers, Head of the laboratory, Haematology and Chemistry, studied the Tempus600 system, and found it very attractive because of its time saving factor. The laboratory subsequently recommended the system to the hospital management as a solution for streamlining the transport of blood samples.

The hospital's need to improve patient treatment through increased efficiency of sample transport has now been met and the solution has become a reality. The distributor Telecom just completed the installation of two Tempus600 systems in the Phlebotomy and the Emergency Department. Blood samples are now dispatched from the department over long distances (350 m and 450 m), directly to the laboratory rather than being carried manually by staff. The samples land in a Sysmex/GLP track System in the fully automated laboratory and are automatically transferred to the track for analysis.

Bob Wieggers expects that the combination of fast, dedicated sample transport and total laboratory automation, will significantly improve turn-around-time, especially on urgent blood samples from the Emergency Department.

Furthermore, creating improved sample flow in the laboratory will smooth out peak demand and free up resources.

Every year at ETZ, 380,000–460,000 samples are sent from Phlebotomy Department and 109,500–146,000 samples are sent from the Emergency Department. Fast and predictable response time is crucial, in order to speed up ambulatory treatment and efficient patient discharge. With the two new Tempus600 systems installed and running, the hospital expects that the blood sample response time will fall from 58 minutes to 35 minutes – an improvement of 40%. This will mean improved flow in the Emergency Department.

The challenge

To improve patient treatment through increased efficiency of sample transport.

The solution

Streamlining the transport of blood samples by installing Tempus600, point-to-point lines dedicated to the transport of blood samples.

The benefits

Expected improvement of turn-around-time by 40%. Improved sample flow in the laboratory and freed up resources.