TUTELA™
monitoring systems

Multi-site Pharmacy
Temperature Monitoring

The Trust provides acute services from their main site in Southend and at outlying satellite clinics across the region, serving a local population of 338,800, employing 4,419 staff.

A comprehensive range of acute services are provided, including acute medical and surgical specialties, general medicine, general surgery, orthopaedics, ear, nose and throat, ophthalmology, cancer treatments, renal dialysis, obstetrics and gynaecology and children's services.

Southend University Hospital is the South Essex surgical centre for uro-oncology and gynae-oncology surgery and is considered to be a centre of excellence for the care of stroke and cancer treatments.

The Monitoring Need

Compliance drives the monitoring need at this busy Pharmacy, and rigorous temperature monitoring to regulatory standards are mandatory to comply with Specials licences and CQC regulations. Furthermore, monitoring is required in multiple departments at 2 geographically separate hospitals – Southend University Hospital and Basildon & Thurrock Trusts – making this a complex estate-wide project.

The legacy monitoring system in place was about to become obsolete, but its direct replacement was based on new technology, and therefore could not demonstrate a proven track record. This lack of reference sites was considered by the facility to be an unacceptable risk given the scope of the project.

The system was required to monitor all Pharmacy departments across Southend University Hospital and Basildon & Thurrock Hospital Aseptic Units, Pharmacy Quality Assurance Laboratory, Pharmacy Stores, together with Nuclear Medicine and Cardio-Thoracic Centres at extreme ends of the sites.

UKAS
CALIBRATION
9474

The search then began for a monitoring system that would meet the Trusts extensive needs and specifications. These included real-time alarm notifications, paired with a cost that was manageable.

Pharmacy operations at the Trust required 24/7 alarm coverage to resolve temperature excursions for each monitored unit,
to create a robust audit trail, and comprehensive data back-up.

The Tutela Monitoring Solution

The Trust evaluated a number of different systems in the market and found the best solution in Tutela's Genesis 3 temperature monitoring system.
It delivered greater functionality, simpler network integration at a cost that met the Trust's budget parameters.

The 3 key factors driving the final choice of system

1. Alarm Call Centre

2. The level of data backup & security provided by Tutela

3. The ease and compatibility with the networks.

With named individuals being called by Tutela when an alarm was triggered, a rigorous audit trail was established to meet compliance obligations. Furthermore, data is stored at a number of levels within the Tutela Genesis 3 hardware to give enhanced resilience in the system onsite, on top of long term data backup on Tutela's mirrored servers.

After-sales service and support was another critical requirement for the Trust, and while the Tutela system appeared to be marginally more expensive on paper, the ease of installation, set-up and calibration reduced the resourcing overhead significantly for the Pharmacy team and Trust IT.

The intuitive web-based interface allows users to gain access to, review and download their private sensing probe and incident audit records and provides vital real-time data.

Being web based, the Tutela system meets the highest level of record security to its customers being fully compliant with FDA CFR 21 part 11, and allows comprehensive access to customer data at anytime, anywhere through the use of Smartphone, Tablet or Laptop or any device able to support a web browser. This has enabled on-call personnel to check alarm status when received in real-time and determine whether immediate action is required, which has prevented unnecessary call outs.

Frictionless Install and Implementation

The installation was driven by a comprehensive site audit which determined final locations for every element of the Genesis 3 hardware in advance of the order. Early, close liaison with the NHS IT team followed which meant that when the Tutela System was installed, there was minimal disruption to day to day working of the Pharmacy department and its dependents.

The monitoring system was then ordered to plan from Tutela, and was easily installed because everyone understood where each element was to be sited – irrespective of the fact that the monitored departments are on different floors of building and in different buildings on each estate.

UKAS
CALIBRATION
9474

Both the Southend University Hospital and Basildon & Thurrock Hospital sites were finished and up and running within 2 weeks, including staff training.

- Departments include Pharmacy Dispensaries, Stores, Pharmacy QA, Radio-Pharmacy, Oncology, PPU (production), aseptic suites, Emergency Drugs, Cardiothoracic Centre;

- Southend has a total of 55 probes running off 3 x WARP controllers and 3 x ethernet repeaters;

- Basildon has a total of 40 probes running off 2 x WARPs and 1 x Ethernet repeater;

- Orsett has a total of 9 probes running off 1 x WARP and 1 x Ethernet repeater;

- Fixtures mainly include Fridges, freezers, incubators and ambient temperatures.

- The system is being considered for other areas including Pathology and mortuary.

The system was calibrated to ISO17025 by Tutela engineers with the first annual calibration being performed.

Temperature Mapping

The Trust also uses 16 Tutela TDL modules, which are used for pharmacy fridge mapping and validation within the Pharmacy areas. The team found these really simple to set up and a further valuable aid to maintaining compliance. They are also being used for performing fridge and ambient monitoring on wards by Pharmacy when an issue is suspected with a storage area to determine whether any action is required.

Key points

- Professional install and responsive support maximises productivity.

- Remote alarming by real people is crucial for maximum inventory protection.

- Remote alarming to named individuals provides a solid audit trail for compliance.

- Secure web access to the user interface enhances functionality.

"On top of satisfying all my compliance needs, what I like about the Tutela System is that I can monitor everything from 2 Hospital Sites in real time in their interface with a click of a button – without moving from my desk "

Richard Skidmore BSc. MSc.
Pharmacy QA Laboratory Manager
Southend University Hospital NHS Foundation Trust

UKAS
CALIBRATION
9474