

EVERYWARE



Case Study
Healthcare

Industry Healthcare

Customer:



South Warwickshire
NHS Foundation Trust

Overview

Every day across every UK hospital, nursing staff periodically check the temperature of ward fridges and chilled pharmaceutical storage units to ensure the desired temperature is maintained. This is to ensure the efficacy of drugs is upheld before being administered. Typically, this has always been a manual process and was often recorded by way of written evidence. During a pandemic the critical temperature sensitive COVID-19 vaccines had to be stored in controlled temperature fridges with no room for error.

Challenge

Everyware Innovation Services team worked with SWFT to customise and enhance the Everyware Asset Management platform that allowed Electro Bio Medical Engineers, Clinical Services, Pharmacists and Nursing staff to switch from a time-consuming manual recording process to a digital one. The challenge was to ensure that all members who managed the cold chain supply across the hospitals could have real time asset monitoring 24/7 with alerts being sent directly to all staff responsible in the event that any fridges experienced a temperature deviation.

Everyware Innovation Services

Innovation Services designed and built an IoT-based Solution leveraging the Everyware Asset Management Platform

In collaboration with Electro Bio Medical Engineering teams at SWFT, Everyware Innovation Services worked to develop a tailored solution using the Everyware Asset Management Platform. Critical success factors included operating with the existing data communications networks in place and creating an innovative Smart Hub to alert ward staff about temperature excursions. This was implemented to accelerate the precision of data capture providing greater accuracy and transmission for the following additional outputs and reporting functionality stored in the cloud.



Monthly management reports: temperature excursions



Corrective Action business process



Out of hours support integration

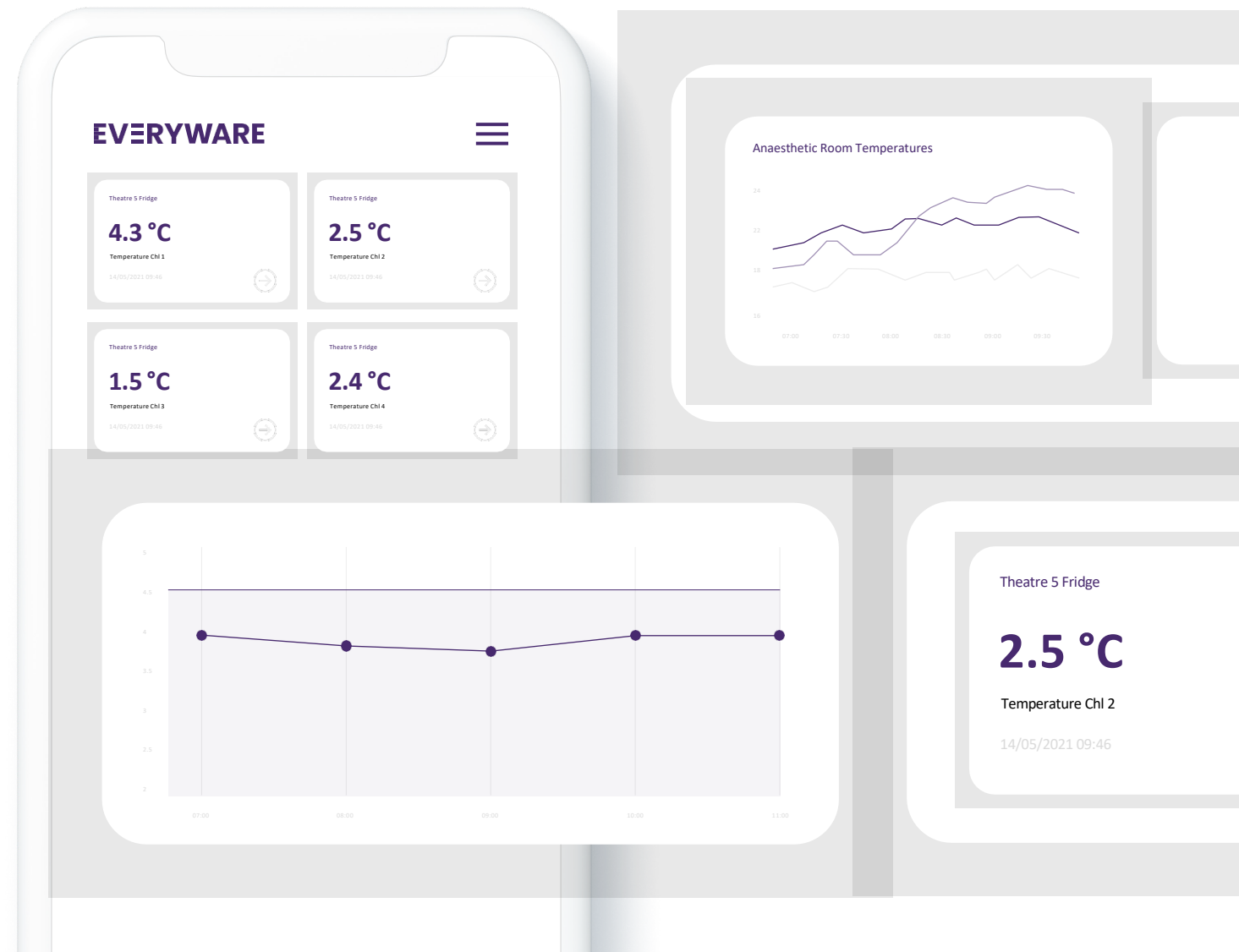


Clinicians Dashboards

Healthcare IoT Solution Provided

Everyware's Healthcare Asset Sensor provides intelligent real time monitoring of critical assets within a health care environment.

At SWFT, equipment such as fridges, medicine storage cabinets, clinicians rooms, operating theatres and blood warming cabinets are just a few of the medical assets we regularly monitor with this tailored Asset Management solution.



Healthcare IoT Solution Provided

Operational parameters including temperature, humidity, pressure and location are collected by the Healthcare asset sensor.



Healthcare IoT Solution Provided

Everyware Sensors



- ✓ Wireless, easy to install sensors.
- ✓ Accurate temperature monitoring.
- ✓ For fridges or indoor healthcare environments.
- ✓ One or two probes can be connected.

Clinician's Smart Hub



- ✓ Collects data from Everyware sensors.
- ✓ Provides onsite readings and alerts for staff.
- ✓ Data is sent to Everyware Platform.
- ✓ Out of hours for site wide alerts such as temperature deviations.

Everyware Platform



- ✓ Secure, cloud-based portal for comprehensive monitoring and reporting.
- ✓ Clinician's dashboard with historical data
- ✓ Temperature audits
- ✓ Alerts
- ✓ Reports

Any technology that saves time for Clinical Services teams always results in better care for patients which is the ultimate goal.

Manually recording the temperature of fridges is a time-consuming process when considering a trust may easily own 200+ assets. A trust with 200 assets will be spending 250 person days a year manually checking these assets. The Everyware solution takes a temperature reading every minute, automating the clinician's job of writing down the temperature manually or checking USB data loggers. In turn, allowing greater availability for time to administer care to patients.



A trust with 200+ assets will be spending at least 250 person-days a year manually checking these assets. Everyware automates the process, taking temperature readings every minute.

Everyware's Asset Management Platform drives business benefits across cold storage value chain

- ✓ **Reduce Wastage.** When temperature deviations occur outside of safe limits (2-8c), compromised medication stock may need a shorter shelf-life applied, or completely scrapped for sensitive medication.
- ✓ **Reduces errors and inaccuracies.** Manually recording temperatures and checking USB data loggers is prone to error.
- ✓ **Compliance Recording in accordance with CQC national standards.** Reliable and accurate temperature logging is a national standard audited by the CQC. Digital records improve efficiency of compliance with accurate data.
- ✓ **Improved Management Reporting.** Developed in partnership with SWFT, the 'Corrective action process'. This innovation provided management information stored in the cloud via the Everyware Asset Management Platform.
- ✓ **Reduce Maintenance Costs.** Poorly performing fridge assets cost a trust more in energy consumption.
- ✓ **Alerts.** Warning indicators for a potential fridge failure.
- ✓ **Identify poor loading procedures.** The Everyware solution helps identify poor loading and stocking procedures.
- ✓ **Easy to install.** The mains powered Everyware Asset Sensor is easy to install with no physical modifications of the assets required.
- ✓ **Integration with out of hours support.** As part of the delivery SWFT required additional integration into existing out of hours support processes.



Solution for SWFT

Everyware helps to automate the collection of critical data from hundreds of fridge assets. The solution provides 24/7 digital temperature tracking & monitoring of storage of high value pharmaceuticals, as well as COVID-19 vaccines, enabling visibility of any issues.

Automating what was a manual process typically taking hours, Everyware Innovation services team assisted the NHS to digitally track and monitor the temperature of cold chain storage of high value pharmaceuticals as well as Covid-19 vaccines.

Our Innovation services team customised and enhanced Everyware's off-the-shelf Asset Management solution delivering real time digital asset monitoring, management information for compliance and integration into existing SWFT operational procedures.

The solution automated the collection of mission critical data from hundreds of fridge assets. This included the temperature status of every asset within the trust in just a few seconds, previously this would have taken many hours of manually recording each individual fridge and collecting the data from written notes or USB data loggers.

The outcome guaranteed 24/7 temperature tracking providing nurses with more time for patient care, NHS Clinical services teams increased operational efficiencies whilst lead pharmacists responsible for ensuring the cold chain process is upheld had greater visibility to any issues of critical stock items in danger of becoming perished. Maintenance teams had access to the reports generated which would initiate requests for service or repair.

Key Results

Everyware revolutionises the way South Warwickshire NHS Foundation Trust monitor their critical assets within their healthcare environment.



Temperature deviation events tracked, reported and fully auditable

200+

200+ critical assets are monitored every 60 seconds.



Multiple hospital sites and localities have unlimited historical data.



24-7 and out of hours support integration provided



Reliably processing 10,000,000+ temperature data points per month.



Clinicians have customised dashboards providing a snapshot of real time temperature conditions in seconds.



Saving 250 person hours of manual checks allowing nurses more time with patients.



Several poorly performing fridges identified and replaced or alerted if doors left open too long.



Critical drugs have been saved averting any loss of stock in due to technical issues with overstocked fridges.

Customer Quotes



Everyware Innovation Services

"Everyware have the ability to listen and design bespoke solutions that meet our needs whilst satisfying financial restraints. The other benefits are that Everyware are able to customise solutions as per customer requirements which is not possible with an off the shelf solution. Everyware listen, they understand the brief and they're willing to work closely with the customer above and beyond what you find from a commercial organisation. We very much look forward to seeing the benefits of the pilot and working closer with Everyware in the future."

Steve Clarke
Head of Electrical Bio Medical
Engineering



South Warwickshire
NHS Foundation Trust



Everyware Asset Management Solution

"The Everyware fridge temperature monitor system has been installed at Stratford Hospital for over 3 years. As well as the obvious benefits of monitoring the ambient room and fridge temperatures to ensure the medicines are kept at the correct temperature it will also provide us with valuable information regarding the performance of our fridges. The data monitoring is continuous and will raise alerts / alarms if set parameters are breached which means we are able to ensure a clear insight into our chilled drug storage and ambient pharmacy conditions. The system was simple and unobtrusive to install. Due to its flexibility and adaptiveness the system has grown in size since the original installation. The services that Everyware provides are reliable, helpful, proactive and they are a pleasure to work with."

Michael Kennedy
Property, Estates and Facilities Manager
SWFT Clinical Services Limited



**SWFT Clinical
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