



Russells Hall Hospital x Optimal Monitoring

Independent monitoring for compliance and operational insight



“Optimal Monitoring gave Russells Hall Hospital the visibility needed to make informed decisions across a complex estate. By bringing key utility, temperature and flow data into one place, the Trust gained clearer operational insight, stronger compliance evidence and a more reliable basis for future investment.”

Engineering Manager, Russells Hall



OVERVIEW

Russells Hall Hospital, part of The Dudley Group NHS Foundation Trust, needed a dependable view of its heat network and combined heat and power (CHP) operations before deciding whether to replace ageing infrastructure.

Optimal Monitoring provided an independent monitoring platform that brought operational and environmental data together in one place.



THE CHALLENGE

Little reliable information was available, and the accessibility and quality of data within the building management system (BMS) could not be relied upon.

Repairing or replacing the BMS was found to be cost prohibitive, so the Trust needed a more practical way to understand performance and support investment decisions.

1

Initial stage

Deploy an independent AMR and environmental monitoring platform as a materially more cost-effective alternative to repairing or replacing the BMS.

2

Data collation

Combine flow, consumption and temperature data for daily analysis of the heat network and CHP performance.

3

Extending the scope

Extend monitoring across site-wide water, gas and electricity supplies to support compliance, cost apportionment and operational planning.



3

site utilities monitored altogether



savings

our client avoided a costly BMS replacement project



faster data

enabled the team to review operations promptly

RESULTS & NEXT STEPS

Daily data analysis Audit-ready evidence trail Monthly reports



Operational and compliance value delivered without relying on a quantified savings figure.

Results

-  Evidence that tanks are cycled periodically, either through normal use or an operational measure.
-  An audit trail to demonstrate compliance during inspections.
-  Early warning of issues that could affect the required cycling regime.
-  Routine reporting that supports management of potential Legionella risk.

Summary

Russells Hall Hospital used an independent monitoring platform to overcome unreliable BMS data and evaluate its heat-network and CHP infrastructure. The same deployment created a broader legacy: site-wide utility visibility, monthly water-tank compliance reporting, early-warning capability, auditability and better-informed investment decisions.

Looking ahead

Monitoring can deliver operational value even when savings are not readily quantified. A flexible deployment can avoid unnecessary meters and disruption without weakening the result.

As a result, Russells Hall are now undergoing new meter installations through Optimal Monitoring which will enable us to have greater insight into their data- specifically their gas usage data.

Key outcomes

- 
Low cost route
Independent platform instead of BMS replacement
- 
Daily insight
Flow, use and temperature reviewed together
- 
Legal compliance
Monthly evidence and inspection audit trail
- 
Informed investment
Operational evidence supports future decisions