

# CASE STUDY

# VISUALIZATION OF OVER 300,000 SQUARE FEET OF REAL TIME TEMPERATURE CONTROL INTO A SINGLE SNAPSHOT



**Upgrade Evolve**

TECHNOLOGY ENVIRONMENTS HUMAN PERFORMANCE

## MISSION OBJECTIVES

# HOSPITAL FACILITY

- UPDATE OBSOLETE ELECTRONIC CONTROLS OVERLAY ON TOP OF PNEUMATICS
- OPTIMIZE NEW AUTOMATION TO REDUCE SMALL HOSPITAL MAINTENANCE STAFF WORKLOAD
- IMPROVE OVERALL IEQ AND IMPROVE RELIABILITY AND ACCURACY OF SYSTEMS



With an approach to not upgrade but revolutionize the performance of a hospital that was built in 1914, U.E. Consulting approached the entire scope of efficient operation. From documentation research to physical inspection and discovery the team quantified the resources and requirements to not only change over technology but leap into greater reliability.

Starting with controls manufacturers listed in a detailed specification, each bidder was examined for past performance and experience. The awarded contractor was then supervised and coached for maximum quality. Counter to current construction practice where the schedule rules all, U.E staff allowed the schedule to be secondary to quality. As quality improved, best practices arose and schedule was maintained.

Where pneumatics provided no feedback on temperature control now the electronic systems report CO2 in patient rooms, temperature and relative humidity. Pressurization and exhaust fan controls problems were also resolved through sophisticated static pressure measurement systems.

When all rooms were not satisfied, the data revealed balance and repair issues long overlooked. Using the data from the new system allowed faster diagnosis of problems and swifter repairs that led to lowering overall energy waste.



With over 400 temperature control zones and air handler status' instantly color coded, real time, every minute a building system operator can scan issues and focus on important repairs without scanning numbers and then interpreting them to comfort temperatures in their head.

With a graphical system that can offer up hundreds of thousands of performance data points a second is a tool that can save time and effort. Trend data interpreted and visualized allows less operator time for training and more time for expert analysis.

In the end, the client received much more than a technical "upgrade". They evolved to a higher way of operation with greater throughput of information with less effort, long standing issues resolved, and a new method to diagnose and resolve issues at lightning speed.

Trust our team to bring you both upgrades and evolution to your organization.

