

Olajumobi Akeeb

Project Abstract - UM Physicians



INTERN

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BS Chemical Engineering, University of Minnesota Duluth 2020

MS Chemical Engineering, University of Minnesota Duluth

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PROJECT FOCUS

Energy

ADVISORS

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COMPANY

University of Minnesota Physicians



COMPANY DESCRIPTION

University of Minnesota Physicians, UMP, is a multi-specialty group practice for the U of M Medical School faculty. UMP partnered with the Fairview Health Services, creating a shared care delivery system - M Health Fairview. The M Health Clinics and Surgery Center in Minneapolis, Minnesota provides a variety of healthcare services including clinical exams and surgeries.

MOTIVATION

UMP aims to reduce energy consumption in the use of steam, chilled water and electricity, and optimize the control of energy consuming equipment. The goal is to balance energy consumption with comfort and sterilization requirements of a healthcare facility.

INCENTIVE

Reducing energy consumption not only reduces operating costs, but it also improves the environmental performance of the building.

GENERAL APPROACH

This project is two phased. The first phase is reducing electrical consumption through automation and optimization of available systems. The second phase is an in-depth analysis of the HVAC and chilled water systems to optimize set points and scheduling to assess possible steam savings.

FOCUS OF RESEARCH / RECOMMENDATIONS

The research is focused on targeted energy reduction strategies while maintaining comfort, air quality and a high-quality experience for patients, visitors, and hospital staff. Recommendations will contribute to M Physicians' efforts to achieve an overall reduction of 25.5% in the EUI (energy use intensity), moving from an EUI of 161 to 120. The recommendations will be based on feasibility of implementation and contribution to the overarching goal of improving efficiency and reliability.