Passavant Area Hospital serves the residents of Morgan, Cass, Greene, Scott and Macoupin counties in West Central Illinois. Passavant has compiled an impressive performance record and numerous awards including the 2009 Magnet designation for excellence in nursing services. The Magnet Award is given by the American Nurses Credentialing Center (ANCC)—only 5 percent of hospitals nationwide achieve this distinction. As part of its ongoing commitment to patient safety and operational excellence, Passavant continuously seeks environmentally-conscious ways to reduce energy consumption, lower operating costs and enhance patient well-being and outcome.

Project summary

- Projected 19 percent decrease in annual energy consumption and $313,000 in annual energy cost savings
- Greenhouse gas emissions reduced 24 percent
- Trane Physical Environment of Care Assessment contributes to
  - Improved patient satisfaction and outcomes
  - Increased staff satisfaction and productivity
  - Greater physician satisfaction and retention
Challenge

Reinforcing their commitment to creating a sustainable environment, Passavant administrators were looking to increase energy efficiency performance, reduce operating costs to be more competitive and improve the environment of care to enhance patient satisfaction and outcomes.

Solution

Trane and Passavant Area Hospital collaborated in assessing the physical environment through Trane’s Environment of Care Study. This holistic facility analysis included interviews, observation, data collection and analysis with top management and representatives of all key hospital areas including facilities, infection control, quality, laboratory, human resources, safety and others. The study identified specific potential, actionable energy efficiency and physical plant upgrades that would improve operational efficiency and enhance the overall environment of care.

- Chiller plant optimization using Trane Tracer Summit™ building automation controls
- Air-Handler upgrades with direct digital controls and re-commissioning of existing control system
- Retrofit lighting fixtures with new energy efficient technologies to improve lighting aesthetics

The project was funded entirely by leveraging guaranteed energy and operational cost savings under a performance contract with Trane. A performance contract is a “self-funding” package of products and services that delivers energy and operating cost reductions. Trane guarantees that calculated actual energy savings will meet the guaranteed energy savings.

In June 2009, Passavant Area Hospital initiated the $2.3 million project in facility wide improvements to upgrade aging infrastructure and to address high energy and operating costs. The project was completed in February 2010.

Results

The project was completed on schedule. The energy and operational improvements will positively impact the patient care environment while decreasing utility consumption by 19 percent which will result in a projected annual savings of more than $313,000. These energy savings are equivalent to funding 4.5 nursing positions annually. The carbon emissions reduction is equivalent to removing 525 cars from the road.

Trane optimizes the performance of homes and buildings around the world. A business of Ingersoll Rand, the leader in creating and sustaining safe, comfortable and energy efficient environments, Trane offers a broad portfolio of advanced controls and HVAC systems, comprehensive building services, and parts. For more information, visit www.Trane.com.