



Boulder Community Health

INTRODUCTION

Boulder Community Health (BCH) is a community owned and operated not-for-profit health system dedicated to providing high-quality medical care in Boulder, CO and surrounding areas. BCH has offered the broadest and deepest range of behavioral health services in Boulder County for the past 100 years.



"OUR VISION WAS TO PROVIDE STAFF AND PATIENTS WITH TOOLS TO HELP REDUCE STRESS AND SUPPORT RECOVERY AND WELLNESS. WITH CRESTRON, WE WERE ABLE TO CREATE AN ENVIRONMENT THAT PROVIDES OUR PATIENTS WITH AN EXPERIENCE UNIQUE TO OUR MENTAL HEALTH FACILITY."

Marjon Pikelharing RN, BSN, PhD
*RN Manager Inpatient Behavioral Health,
Boulder Community Health*

THE CHALLENGE

For its Della Cava Family Medical Pavilion, BCH wanted to explore how the addition of tunable lighting could improve the lives of patients. The innovative, thoughtfully designed facility provides a healing environment in which different levels of care support patients on their road to wellness.



THE SOLUTION

BCH is proud to be an early adopter of new technologies and medical techniques that improve care for their patients. Research has suggested a link between the body's natural circadian rhythm and stress reduction. This inspired BCH to deploy an advanced lighting solution that would help patients in their healing process, while being adaptable and easy to use and manage for staff. Working with lighting consultant Visual Interest, BCH standardized on a Crestron tunable white lighting system with DALI® lighting control throughout the Pavilion.

"WE WANTED TO GIVE PATIENTS A SENSE OF INDEPENDENCE. CRESTRON LIGHTING PROVIDED US WITH A WAY TO GIVE PATIENTS MORE CONTROL OVER THEIR STAY."

Marjon Pekelharing RN, BSN, PhD
*RN Manager Inpatient Behavioral Health,
Boulder Community Health*

THE TECHNOLOGY

Crestron Green Light® photosensors continually monitor the amount of daylight coming through the windows. Using this information, the Crestron control system automatically adjusts room lighting, accordingly. "Our staff and patients have found it is more pleasant to have circadian lighting versus the bright, white light at night," says Pekelharing. "The inpatient unit is taking part in a research study focusing on the effects the circadian lighting has on physical symptoms of staff working the night shift, such as headaches, tiredness, nausea."

When a space is left unoccupied, ceiling-mounted occupancy sensors throughout the facility provide reliable motion-detection to reduce energy usage. Cresnet® partition sensors, designed with hospitality environments in mind, use an infrared beam to sense the position of movable partitions within a space for further automation. The Cresnet communications network enables direct connection to a Crestron control system for integrated lighting and climate control. Beyond the automated features of the system, patients and staff also have the option to manually adjust room lighting using sleek Crestron Cameo® keypads.

Crestron Fusion® monitoring and scheduling software adds another layer of intelligence to the facility. With the data collected, researchers at Pacific Northwest National Laboratory (PNNL) have been able to analyze the effectiveness of the lighting control system as well as observe how the patients and staff are using it.

"WITH CRESTRON, WE WERE ABLE TO REPLICATE THE EXPERIENCE OF NATURAL SUNLIGHT FOR PATIENTS AND STAFF BY AUTOMATING CHANGES IN COLOR TEMPERATURE AND LIGHTING INTENSITY THROUGHOUT THE COURSE OF THE DAY."

Alyssa Weber, PE, LEED AP BD+C
*Controls Manager,
Visual Interest*





RESULTS

With Crestron circadian lighting and lighting control, BCH can not only offer an environment that promotes healing for patients, but also a more soothing environment for everyone. "Patients frequently say their rooms feel like a hotel and sometimes they don't want to leave the hospital," explains Pekelharing. "They appreciate having control over the lighting in their room and being able to adjust it to meet their needs makes them feel more relaxed and comfortable."

Featured Products

DIN Rail 2-Channel DALI® Interface
DIN-DALI-2

Crestron Fusion® software

XPanel – Crestron Control® Interface

Cameo® Keypad, Standard Mount
C2N-CBD

Cresnet® Partition Sensor
GLS-PART-CN

Dual-Technology Occupancy Sensor with Cresnet
GLS-ODT-C-CN

Dual-Technology Ceiling Mount Occupancy Sensor
GLS-ODT-C-NS

Lighting Playback Controller, 1 Universe
DIN-DMX-1UNIVERSE

Crestron Green Light® Photosensor, Open-Loop
GLS-LOL
