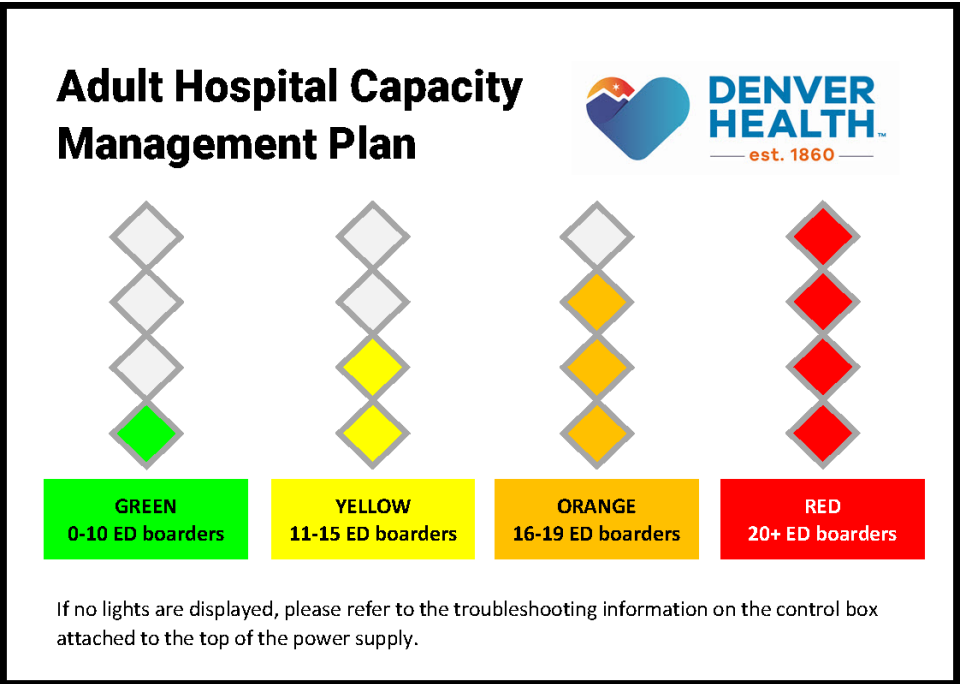


Unique Display Lights Illuminate Hospital Bed Capacity

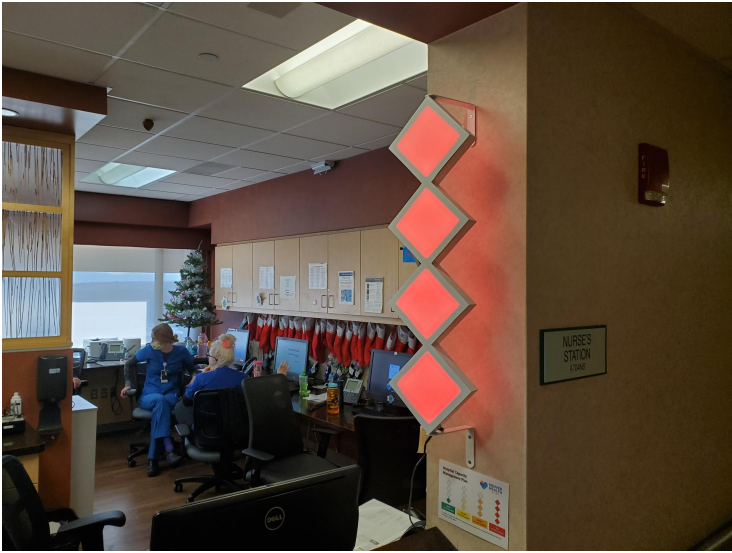


Unique display lights created by a Denver Health instructional designer are helping the hospital stay on top of a constant challenge – bed capacity. Custom-built indicators installed at nursing stations on all adult acute care units change colors as the number of patients waiting for a bed rises and falls. The new, automated system alleviates the headache of a previously manual process that required nurses on every floor to continually update posters, which were often incorrect. It also increases visibility for all staff.

Corresponding with the four levels in Denver Health’s [Hospital Capacity Management Plan](#), the display illuminates green when capacity strain is lower, with between 0-10 patients in the Emergency Department (E.D.) waiting for an inpatient bed. One green light becomes two yellow lights as capacity begins to rise, with 11-15 E.D. boarders.



Three orange lights indicate 16-19 boarders, and four red lights mean 20 or more patients are waiting for a bed. Connected via Wi-Fi, the smart lights change color based on the latest capacity level alert email sent from Epic.



“The goal is to increase awareness of the current number of E.D. boarders and encourage hospital staff to initiate each level’s interventions so we can facilitate as many appropriate patient discharges as possible to open up hospital beds for people who need them,” said Mara Prandi-Abrams, operations manager of patient flow.

Displays also show when capacity strain de-escalates, a process that didn’t exist before for fear of email alert fatigue. A linchpin in bed capacity awareness, the low-cost solution was designed, built and programmed by Rich Path, lead instructional designer in Denver Health’s Information Technology (IT) Department. Path worked in collaboration with Prandi-Abrams to develop the brainchild born from his master’s degree thesis in Emergent Digital Practices. In addition to 6A, 7A, 8A, 9A, 4B and 4C South, the novel hardware also illuminates capacity for staff in the patient discharge pharmacy in Pavilion C’s basement and the Patient Flow Center on the first floor of Pavilion A.

