

**CHALLENGE**  
**ACTION**  
**RESULT**

SETTING THE  
BAR FOR  
SUCCESS  
IN ACTION

# THE MID AND SOUTH ESSEX UNIVERSITY HOSPITALS GROUP (MSE)

*Billericay, United Kingdom*



The Mid and South Essex University Hospitals Group (MSE) is comprised of three hospitals—Mid Essex, Southend and Basildon. MSE is an 1,800 bed system committed to providing the highest quality patient care. The planned merger of the hospitals, slated for 2020, was viewed as an opportunity to review workflows and operationalize the care continuum in order to improve overall efficiency, maximize capacity and provide excellent patient care. Mid Essex Hospital Services NHS Trust provides a comprehensive range of acute and community-based services to a local population of approximately 371,000. Southend University Hospital provides health care for nearly 330,000 people through a comprehensive range of acute services found at the main Prittlewell Chase site and at outlying satellite clinics across the region. Basildon and Thurrock University Hospitals NHS Foundation Trust primarily provides services for 405,000 people living in southwest Essex covering Basildon and Thurrock, together with parts of Brentwood and Castle Point.

## CHALLENGE

- Each year, NHS Trusts spend between £2 million and £7 million adding capacity in an effort to treat more patients. Some have attempted building new wards and adding more beds, but the challenges remain the same because core operational issues haven't been addressed.
- A common challenge among NHS Trusts is a lack of visibility related to real-time bed capacity—leading to beds not being cleaned as soon as they became available, and the inability to fill beds when they were clean and ready. Periodically, nurses would roam wards to find beds. Nurses were also sometimes tasked with bed preparation, which would cause delays in bed turnaround, in addition to patients being placed in the wrong wards because ED beds are typically allocated on 'time waited' rather than 'care needed.' Combined, these factors impacted getting the right patient into the right bed.
- Manual approaches to key processes were impacting the co-ordination of admissions and discharges from the hospitals.

## ACTION

- The merger of the hospitals was viewed as an opportunity to review workflows and operationalize the care continuum in order to improve overall efficiency, maximize capacity and provide excellent patient care.
- The decision was made to launch a centralized control center to improve co-ordination of patient admissions and discharges among the three sites and their satellite locations, and to provide visibility across the entire MSE system, allowing caregivers to view and anticipate bed demand and availability in real-time. MSE also analyzes operations by using predictive models to anticipate downstream demand and adjust resources to changing circumstances in real-time.
- The centralized control center allows MSE to identify root causes of operational inefficiencies across the enterprise and make the correct decisions to eliminate those inefficiencies—contributing to reducing patient wait times, decreasing discharge times and lowering a patient's length of stay.
- The 1,150-square foot facility is operated 24/7, 365 days a year by a staff of 52 nursing professionals.
- Operational decisions are driven by an independent executive team and a managing director for each hospital in the group. In addition, a complimenting mobile app allows caregivers to view bed status in real-time from their devices to make data-driven decisions, ensuring that patients get to the right bed sooner and receive the care that they need.
- The centralized control center also makes it possible to track the location and use of equipment across all MSE sites to ensure that it is in the right place at the right time.

## RESULTS

- The implementation of the centralized control center has provided the tools to analyze metrics and determine the factors that are driving those metrics. With this information, the trusts now have a complete picture of the overall patient flow process, as well as the actionable data to make the adjustments that result in an enhanced patient experience. For example:
- Nurse time back to care [August 2019]—406 hours per week
  - Bed assignment time (time waiting in ED for a bed to be assigned) reduction [November 2018-August 2019]—Mid Essex Hospital Services had a 56% reduction; Southend University Hospital had a 52% reduction; and the overall average was a 17.4% reduction
  - Cancelled operations (number of last-minute elective operations canceled for non-clinical reasons) reduction [based on averages using April-June 2018 data compared to April-June 2019 data]—Southend University Hospital had a 46.6% reduction and the overall average was a 17.4% reduction
- With the improved operational efficiencies generated by the control center, the wards are quieter and consequently less stressful for the nursing staff. In addition, patients are receiving the care they need more quickly, improving both their satisfaction level and overall outcomes.