

Command Center helps improve Patient Flow, saving \$20M in first year

Case Study: The Queen's Health Systems

Background

The Queen's Health Systems (Queen's) in Hawaii has been working to reduce the length of stay (LOS) for several years. As long-standing LOS issues and post-pandemic challenges such as staffing shortages and leadership changes converged, problems related to inefficient patient flow including Emergency Department (ED) overcrowding and the ability to accept transfer patients worsened. To address the growing challenges holistically, Queen's created a cross-functional team to implement several interconnected LOS and patient flow initiatives.

"Once we moved length of stay from a financial discussion to a clinical discussion focused on patient care safety and quality—with support from the CEO and CFO—we were positioned to address the issues more effectively."

— Ashley Shearer, LCSW, CSAC, Senior Director of Care Coordination & Patient Flow at The Queen's Health Systems

Approach

Central to its patient flow initiatives, Queen's deployed a command center to aggregate real-time data and provide actionable insights to operational and care teams focused on managing capacity and expediting transfers and discharges.

- Launch the Aukahi Command Center, a 13,000-square-foot operational hub for a 575-bed Level 1 trauma center in Honolulu and a 120-bed community hospital on the other side of Oahu
- Use Command Center technology to visualize real-time patient information, maintain situational awareness, and optimize patient intake and transfer processes
- Deploy a capacity management strategy that details surge activation and decompression plans for each area of the hospital
- Utilize daily Multi-Disciplinary Discharge Rounds to identify and escalate discharge barriers

Impact

The Queen's Health Systems achieved faster admissions, smoother patient flow, better care coordination, and reduced operational costs in the ten months following the opening of the Aukahi Command Center—an integral part of the system's comprehensive patient flow initiatives.

*All metrics provided by The Queen's Health Systems. Length of stay, ED Admit LOS, ED Boarding, and Transfer metrics are based on data from January 2024 to October 2024. Savings calculation is based on YoY ALOS metrics from 2023 to 2024 and assume a \$1200 cost per patient per day.

"The launch of the Aukahi Center brought our technology, teams, and operations into better alignment—but just as importantly, it signaled to our staff that we're serious about sustaining the progress we've made. It's a clear commitment to continuous improvement and, ultimately, to delivering better outcomes for our patients."

— Matt Ing, MD, Vice President of Medical Affairs and Chief Medical Officer at The Queen's Health Systems

Improve patient flow

1.07 day decrease in LOS

Ten months after the opening of the Aukahi Command Center.

Increase ED throughput

41.2% reduction in the ED Admit LOS

ED LOS for admitted patients decreased by 248 minutes in ten months while the average daily volume of ED admissions remained steady.

63.9% decrease in patients boarding in the ED in ten months

In the tenth month after the Aukahi Center opened, Queen's boarded 503 fewer patients in the ED than the month prior to opening—even though average daily ED admissions remained steady.

Increase access to care

22.2% increase in transfers in ten months

Ten months after the Aukahi Center opened, Queen's accepted 100 additional monthly transfer patients, improving access to care across all of Hawaii.

Result

\$20M in savings

In the first year following the opening of the Aukahi Center, Queen's focused on enterprise wide patient flow initiatives and achieved an estimated \$20M in savings through reduced length of stay.

"We've made a pretty significant impact in a short amount of time by doing our due diligence and focusing on using real-time technology to help make the patient experience better, improve quality, and improve access for both local and transfer patients."

— Jason Chang, President and CEO of The Queen's Health Systems