



Overview: About Children's Nebraska

The only full-service pediatric healthcare center in the state of Nebraska, the Omaha-based Children's Nebraska has a mission to "improve the life of every child", and those in their communities, through comprehensive care. Also serving patients in Iowa, South Dakota, Kansas, and Missouri, Children's provides Nebraska's only level II trauma center and level IV NICU trauma center, as well as a top ranked pediatric heart program.

The system's 225-bed main medical center consisting of 13 operating rooms (ORs) and has performed over 18,000 surgeries, despite limited staff and closed ORs this past year and a 4-OR surgery center has in turn performed 3,400 cases as of late 2022, showing similar growth.

Problem

Children's Nebraska faced common yet critical challenges for a growing pediatric health system with a large footprint, as it prioritized delivering high quality and effective care but met with capacity roadblocks to doing so. Surgeons consistently showed low utilization of the OR block time they were assigned, but also did not want to release their time as they believed they would not be able to book the open time they needed to perform cases. This created a cycle of consistently late release periods and a dearth of open time, reinforcing the surgeons' scarcity mindset and motivation to hoard time. The limited trust providers and staff had in the data used in the past for block allocation exacerbated this cycle.

Other challenges included limited staffing resources, as multiple facilities in the same geographic region needed similarly-skilled staff from the same relatively small pool, and seasonal waves of elective and urgent cases, meaning demands for types of time, rooms, and resources shifted abruptly in short periods.

Children's Nebraska needed a solution to make usable open time available and easy to claim and to make accurate block usage data visible and actionable to stakeholders.



Solution

Children's Nebraska implementation of iQueue for Operating Rooms initially began in September 2021 and in November 2021 the solution launched to a core group of users for data validation. A single module (Exchange, below) went live system-wide in February 2022. The comparatively long implementation and validation period, undertaken in partnership with surgeon champions, allowed time to develop trust in the solution with key surgeons. Throughout the validation period, the iQueue team provided streamlined communication with specialty clinic teams, and built partnerships with leaders, meeting with each division chief to learn the unique challenges, opportunities, and areas of interest for different surgeons and departments.

The deployed iQueue modules included:

- Analyze, to give all stakeholders customized views of accurate, up-to-date OR utilization data and provide a trustworthy "single source of truth."
- Collect & Allocate, to help schedulers identify and reassign "Collectable" OR time that was viable for cases but previously went unused.
- Exchange, to provide an "OpenTable"-like platform for surgeons to easily release and book open time from any device. It also allowed users to predict room utilization to show upcoming needs for staffing and resources based on likely caseloads.

Children's Nebraska also deployed iQueue for Operating Rooms on its hybrid cases, to help align specialists with surgeons' cases and availability without compromising PHI or requiring in-depth EHR training.

The data provided by iQueue for Operating Rooms, supplemented by more comprehensive, transparent data reporting, fostered trust among surgeons and division chiefs. They now all relied on the same system-wide source of information, which supported productive discussions about block allocation and policies as everyone could view and agree on the same data points. The tools for identifying and exchanging OR time helped surgeons view and claim the time they needed, alleviating their scarcity mindset and leading to more proactive releases. Configurable room access, which made only appropriate rooms visible to each service line, reduced scheduling churn and improved care access by directing the right cases to the right locations.

Results

In one year following full implementation of iQueue for Operating Rooms, Children's Nebraska achieved:

12%
overall increase in volume

25%
improvement in release proactivity

45%
improvement in request proactivity

4%
improvement in overall Block Utilization

7%
improvement in overall Prime Time Utilization



