LeanTaaS

Digital Transformation of Core OR Processes

iQueue
FOR OPERATING ROOMS

Memorial HEALTH

MONUMENT HEALTH

RUSH

UNIVERSITY MEDICAL CENTER OF EL PASO

MultiCare

Dignity Health. CommonSpirit

NOVANT HEALTH

OHSU

BAPTIST Medical Center South

uchealth

THE UNIVERSITY OF KANSAS HEALTH SYSTEM

parkview MEDICAL CENTER Caring For You

OhioHealth BELIEVE IN WE

MOUNT NITTANY HEALTH

GUNDERSEN HEALTH SYSTEM

Hartford HealthCare St. Vincent's Medical Center

WakeMed

98
Health Systems

5,600
Operating Rooms

30-50
More Cases Performed per OR per Year

Memorial HEALTH

Overview

Memorial Hospital is an independent not-for-profit community hospital located in Marysville, Ohio. The main hospital has three operating rooms (OR), along with two endoscopy rooms, one obstetrical operating room, and a free standing surgery center. Performing over 6,000 procedures annually, Memorial Hospital is dedicated to providing high-quality care to the local community.

Like many hospitals, however, Memorial faced challenges with operational inefficiencies that impacted scheduling and surgeon engagement.

Challenges

Memorial Hospital faced challenges with siloed scheduling and block management practices, which ultimately impacted case volume and overall OR efficiency. The lack of a single source of truth for open OR time, block time releases, and/or block time transfers contributed to inefficient communication practices between the provider offices and the surgery schedulers. These communication practices consisted of back-and-forth phone calls to identify open block time along with block release requests filtering through email. Both practices led to missed opportunities to fill and utilize prime time hours in the OR.

Another challenge Memorial Hospital faced was aligning standardized processes with real time data and analytics to promote OR efficiency and end user engagement. For example, providers received credit for block utilization when released 14+ days out which inherently disincentivized block time releases between 7-14 days out. This contributed to a highly blocked schedule with limited open OR time. Furthermore, the lack of real time data transparency impacted provider engagement. Quarterly reporting of data, which was extracted manually from the EMR, led to a lack of provider buy-in to the established processes.

Solution

To address these challenges, Memorial Hospital partnered with LeanTaaS to implement the AI-powered iQueue for Operating Rooms. This platform standardized visibility into open time requests, releases, and transfers, leading to a significant decrease in phone calls and emails between clinic and OR schedulers.

iQueue's **Analyze** module standardized metric definitions and automated real-time data pushes to physicians and leadership, which increased physician engagement and accountability for block time releases. Additional OR time was created by leveraging release reminder's, along with the **Collect and Allocate** module systematically evaluating block utilization and aligning the supply of OR time with demand based on surgeons' actual needs. Leadership utilized data from iQueue to drive new block policy amendments that provided a standardized process for block review and changes, while aligning a block utilization crediting rule with 7-day auto releases. They also further incentivized surgeons to release between 17 and 7 days.

Results

26% ▲
increase in case volume in FY Q2 2023 (post iQueue launch) compared to the same time period pre-iQueue, for Top 10 iQueue physician users

12% ▲
increase in block utilization and **9%** increase in staffed room in FY Q2 2023 overall compared to the same time period pre-iQueue

42
days release proactivity

28
days request proactivity

71,000
proactive manual released minutes

70
requests in open time, securing an additional **9,000** minutes for block dates in FY Q2 2023

Overview

Monument Health Rapid City Hospital is a community hospital in South Dakota, consisting of 12 operating rooms, 4 endoscopy suites, and is a licensed Level II trauma center. Rapid City Hospital is the largest medical center in the region, supporting over 360,000 people in western South Dakota.

Rapid City Hospital is the largest of five hospitals in the Monument Health system, all located in the Black Hills region. It has been dedicated to serving the community and providing high quality healthcare since 1878. The system is also part of the Mayo Clinic Care Network, which provides improved quality of care to patients at no additional cost.

Problem

At Monument Health perioperative departments, gaining access to operating room open time was mainly completed over the phone or via fax. Only one or two clinics could reach the OR scheduling team at once, without any guarantee the time they needed would be available once they did connect with them. On top of this, given the constantly evolving schedule due to COVID-19, opening and closing first-come, first-serve rooms quickly became a priority. This was not easily executed through Monument Health's electronic health record (EHR).

For leadership, pulling key metrics for surgeons and managers is often a manual and time-consuming process when working directly with an EHR. This becomes even more difficult when trying to create visualizations for day-to-day operational decisions. It was critical for the Monument Health team to easily see how many rooms they needed to staff throughout the day and ensure no resources were going unused.

Solution

Monument Health implemented iQueue for Operating Rooms' Exchange module to increase the efficiency of scheduling teams looking for OR time. Clinics can now immediately see times available in the OR that fit their provider's case criteria. This eliminates the time-consuming phone calls and faxes when looking for first-come, first-serve time, while also providing alternative scheduling opportunities when needed. Additionally, iQueue allows OR schedulers to quickly manage open time as soon as staffing, equipment, or policy constraints arise, rather than making more complicated changes on the scheduling grid.

The Analyze module has further allowed the leadership team at Monument Health to quickly view metrics and create reports without needing to manually calculate or pull data from their EHR. To further support data transparency, personalized performance reports are sent to providers and managers to ensure they have convenient access to their data. The room usage visualizers have been an important data point used to support staffing decisions and increase efficiency. Using iQueue's visualization solutions, the Monument Health team is able to determine when staffing is needed, and when resources can be conserved or repurposed.

RESULTS:

1,600
FCFS minutes managed per OR per month though iQueue's Capacity tool
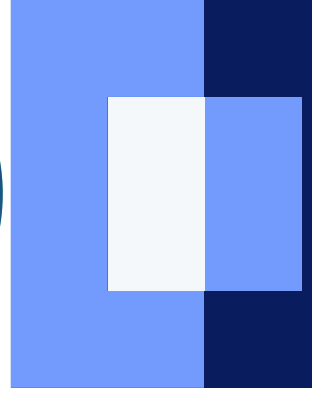
Visualizations
provide actionable data to make staffing more efficient

880
minutes of released OR time is requested again through Exchange every month

17% ▲
increase in released minutes with 442 reminders to providers about unused time

RUSH

Problem

Located in downtown Chicago, Rush University Medical Center is a nationally ranked hospital that performs over 44,000 surgeries a year. Rush is ranked as one of the top US hospitals, and has 11 top ranked clinic programs, including three of the best in the state of Illinois.

With its 38 physical operating rooms and its need to recruit new surgeons, Rush had a completely blocked schedule with short auto-release times. This caused a number of challenges to truly optimizing OR capacity and helping surgeons find sufficient open operating time to perform their cases.

"When I started this role [in 2020], I immediately had calls from surgeons wanting more time in the OR", says Janet Stifter, VP Hospital Operations, Perioperative and Interventional Services and Professional Nursing Practice at Rush. "We were constantly trying to recruit new surgeons...when everything is blocked on the OR schedule it was a hard sell."

Due to this scarcity, departments tended to hoard what time they did have and were reluctant to release it. Some low-utilization specialties were especially prone to holding on to time. In this environment, new surgeons were challenged with finding and reserving the operating time they needed.

Especially after the backlog of postponed or delayed cases accumulated after the initial COVID-19 surge in 2020, Rush needed a technology solution that would help unlock as much OR capacity as possible while improving utilization and developing surgeons' trust that they could obtain the time they needed.

Solution

Rush went live with iQueue for Operating Rooms during the pandemic. The implementation, which entailed minimal change management, immediately made data about block utilization visible to surgeons, department leaders and schedulers alike. This single source of truth led to productive, fact-centered discussions about how much time individual surgeons truly needed, as well as how to release or transfer time that was not being actively used across surgeons and service lines. Overall, this enabled more cases to be performed in the time and space available. "One of the most powerful things about iQueue was the data...surgeons really relate to data," says Stifter. Surgeon trust in the scheduling system was noticeably strengthened by this data access.

The iQueue Exchange module was particularly crucial to addressing the problems Rush faced. The user-friendly, OpenTable-like platform let surgeons actively reserve and release time as well as track their own performance metrics. Newer surgeons felt empowered to claim the time they needed, while more senior surgeons felt freer to release excess time they were allocated but did not need. As Stifter describes, "the whole concept of surgeons using technology to drive their own scheduling is a lucrative portion of using iQueue."

Results

After about a year of use in iQueue, Rush saw a 3% increase in overall room utilization, showing surgeons and staff were able to perform more cases within preferred hours and avoid early mornings and late nights. The OR minutes for Rush's top requesters of time also grew by 30%. Abandoned block time, meanwhile, decreased by 16%.

What supported these results was a dramatic increase in time to release, which previously ranged on average from under 24 hours to five days. Now "we've had as much as a three-week lead in releasing time, and far fewer emergency and urgent cases," Stifter says.

Overall, with the support of iQueue for OR, Stifter has "as a new leader, been able to enhance surgeons' experience and identify ways to get them more time in the OR." The results show success.

3%
Increase in overall room utilization

OR minutes grew by
30%

Abandoned block time decreased by
16%

Overview

University Medical Center of El Paso is a not-for-profit community hospital in El Paso, Texas with 11 operating rooms and one trauma room. The hospital provides the only Level 1 trauma center and Level 1 stroke center in the El Paso region. UMC El Paso also serves as a teaching institution in partnership with Texas Tech University's Paul L. Foster School of Medicine. Consistently named one of America's Top 100 Hospitals, UMC El Paso has been providing the region with quality healthcare for more than a century.

Problem

UMC El Paso's leadership requires regular reporting to make effective management decisions and optimize perioperative workflows. Manually creating these reports was time consuming, especially given individual metric requests from providers.

Additionally, surgeons felt there was not enough time in their assigned blocks and had little access to open time to supplement this. This resulted in surgeons requesting additional block time or having to add their cases to add-on time. Although there was already ample first-come-first-serve time, visibility into it was limited. Additionally, gaining access to this time early, which was often not possible, is a key factor in ensuring the time is used.

Solution

UMC El Paso implemented iQueue's Analyze module to help with the reporting needs of the organization. This empowered their reporting team to quickly have access to many key metrics used to monitor OR efficiency as well as deep dive into key operational questions. Furthermore, Analyze allowed surgeons to have access to their individualized up-to-date metrics at any time and have reports sent to them on a weekly basis.

Exchange increased surgeons' and schedulers' visibility into the open time on the scheduling grid and made it easy to find and reserve open time for cases. Open time is now visible and being requested months in advance through the Exchange open time calendar. In addition to this, surgeons can now quickly see when robotic equipment is available, ensuring precious OR equipment is able to be utilized.

Results

19%
Increase in case minutes per OR during first six months of iQueue usage compared to same time previous year

Over
50%
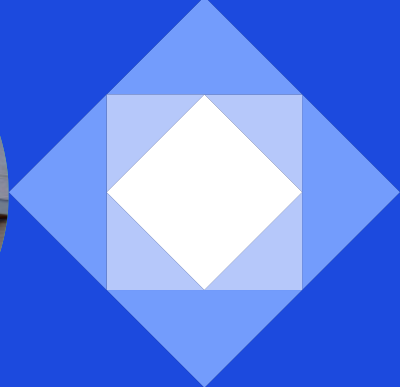Of surgeons using iQueue are receiving Analyze metrics via SMS or Email

Over
14,500
Minutes of requested open time per OR during first year with iQueue

On average, open time requests are being made two weeks earlier than when iQueue was first implemented

MultiCare ✚

Overview

MultiCare Health System is a not-for-profit health care system serving the Washington state community for well over a century. Consistently ranked as one of the nation's Most Wired healthcare organizations by "Hospitals & Health Networks" magazine, MultiCare maintains a constant and unwavering dedication to the health of the community. The organization consists of 11 hospitals, as well as a robust network of primary, virtual, urgent and specialty care services.

Problem

In the years leading up to the COVID-19 pandemic, MultiCare's perioperative leadership were committed to:

- Increasing operating room (OR) access for new and existing surgeons,
- Continuing to attract new surgeons while accommodating for growth and significant backlog in existing ORs, and
- Improving data credibility and transparency across the organization.

Block management was manual and time-consuming and the data was retrospective. MultiCare was committed to improving efficiency and finding an effective way to increase visibility, accessibility, and accountability of OR time. MultiCare partnered with LeanTaaS to optimize OR capacity.

MultiCare was making great strides in optimizing OR primetime utilization and accommodating growth, experiencing growth in primetime utilization of over 12% across 30 operating rooms. In early March 2020, MultiCare found itself at the epicenter of the United States' first wave of the COVID-19 pandemic. The organization re-focused its priorities on telemedicine and centralized coordination of patients. As MultiCare emerged from the first wave, it faced not only the unknown but also coordinating elective surgery cases that had been canceled by state authorities. The organization used iQueue for Operating Rooms and its partnership with LeanTaaS as a tool to manage OR capacity and accommodate elective surgeries.

Solution

LeanTaaS' iQueue for Operating Rooms tool is a scalable, cost-effective solution that can be integrated with Epic EHR, providing cloud-based access on mobile and web browsers. iQueue's real-time OR utilization and performance data can increase capacity to existing OR, by:

- **Improving OR access:** iQueue for OR streamlines a surgeon office's ability to find open time, enabling surgeons to easily and proactively release unneeded block time far enough in advance to be efficiently filled by another surgeon. This not only helps existing surgeons eliminate case backlogs, but also provides ease of access to open time for new surgeons looking to bring cases.
- **Increasing surgeon engagement:** iQueue for OR simplifies data sharing across campuses, improving data transparency and credibility for all stakeholders. Surgeons now have better visibility into their utilization and performance metrics.
- **Providing a more efficient way of managing block time:** The solution provides a simplified, real-time, productive approach for monitoring block utilization and a far less contentious way of collecting and allocating block time.

iQueue for Operating Rooms also provides on-demand access to a comprehensive set of daily metrics to help leadership quickly identify trends and address opportunities for improvement.

Results

In the two years since implementing iQueue for Operating Rooms, and prior to the first wave of COVID-19, MultiCare experienced:
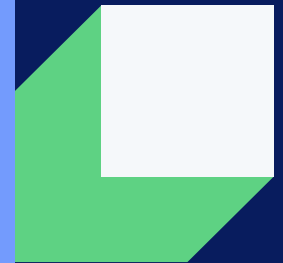
35%
Decrease in
unused blocks

15.2%
Increase in
case volume

12.4%
Increase in
prime-time utilization

Overview

Dignity Health is a nonprofit network of more than 40 acute care hospitals, and 400-plus care centers, including community hospitals, urgent care, surgery and imaging centers, home health, and primary care clinics in Arizona, California, and Nevada. Collectively, the Dignity Health network includes more than 250 operating rooms.

By establishing and nurturing cross-functional partnerships across different teams, Dignity Health gained access to near real-time operating room performance data, trends, and predictions down to the surgeon level. This not only improved OR utilization, it streamlined the scheduling process for OR schedulers and surgeons, and enhanced the opportunity based on patients' preferences.

Dignity Health joined together with Catholic Health Initiatives in early 2019 to create a new nonprofit Catholic health system dedicated to serving the common good: CommonSpirit Health.

Problem

Dignity Health Perioperative Services found that utilizing traditional block management methods for surgical schedules resulted in a lack of foresight into what block time would ultimately go unused, limiting OR access. They relied on a time-consuming manual release process dependent on each physician office. Outdated "phone and fax" methods to change schedules were inefficient and unproductive. Additionally, there was low accountability for block time using block utilization as the metric. It was hard to hold block owners accountable using a one-dimensional metric. Influence, not data, often drove allocation.

With limited visibility and transparency of key metrics, valuable information was buried in hundreds of reports that were time consuming to produce and consume. Valuable OR time went unused, impacting surgeon satisfaction, patient access and hospital ROI. Dignity Health leadership realized they needed a predictive and prescriptive approach to analyzing and increasing OR utilization. It was time to adopt a new technology and realize a greater return on investment.

Solution

To address the aforementioned problem, the Dignity Health Executive Leadership team searched for a solution that aligned with and promoted their enterprise core values of collaboration, inclusion, integrity, and excellence. They partnered with LeanTaaS to deploy iQueue for Operating Rooms' three modules system-wide. Dignity Health's parent company, CommonSpirit Health, facilitated the deployment process through a collaboration between Patient Care Services (Perioperative Services) and IT Digital and Software Engineering teams.

The tools were operationalized by key OR stakeholders who provided their OR expertise, and also by physician outreach/ market representatives and business development liaisons who provided a market perspective. This created a closed-loop cycle that synergized in-house hospital personnel with market development and sales to comprehensively merge actual OR conditions-to-market positions.

The three aforementioned modules – **Analyze**, **Collect**, and **Exchange** – address three main pillars to improve OR performance and efficiencies: Visibility, Accountability, and Accessibility

Exchange: Exchange created OR access for surgeons needing time through an Open Table-like "marketplace for Open Time."

It encouraged proactive release of allocated block time and created transparency into open time. The result? Shorter wait times for patients, more tightly packed schedules, and more cases scheduled.

Collect: Utilizing Collect, a much more actionable and surgeon-centric methodology to analyze block usage, changed Block Policy to focus on large chunks of unused block time that were truly reusable by the OR – "Collectable Time" instead of "Block Utilization." Collect analyzed historical usage of allocated block time and recognized patterns to determine the unused chunks of time – termed collectable time – that could be released or repurposed to fill with other cases, thereby increasing patient access. Focusing on "Collectable Time" resulted in more accountability for block time than through Block Utilization.

Analyze: Analyze created a single source of truth for understanding OR performance and decision making. Significantly improving provider engagement, it shed light on credible performance metrics through mobile and web "push." It allowed Dignity Health to predict high and low volume days, underutilized blocks, trends and anomalies accessed through a web-based, user friendly dashboard.

Results

Dignity Health tapped iQueue for OR to identify changes in business patterns, identify opportunities for growth by unlocking OR time, have more data-driven and actionable conversations with care practitioners. This helped further foster the system's core value of integrity by establishing one single source of truth for analytics and OR accessibility.

By deploying the iQueue product suite across its 250+ ORs, Dignity Health in turn received actionable, personalized insights that advanced the timely delivery of quality patient care. These insights enabled them to achieve impressive results including growth of surgical market share, improved daily efficiencies and asset utilization, and hardwiring best practice behaviors within EHR and operations management. By adopting a "virtuous cycle" mindset, Dignity Health minimized unused OR time whilst maximizing utilization simultaneously by unlocking new OR capacity - accessible for all surgeons to utilize - via proactive block release patterns. A "virtuous cycle" is a chain of events in which one desirable occurrence leads to another which further promotes the first occurrence and so on resulting in a continuous process of improvement. iQueue's Exchange module has provided surgeons and schedulers alike increased visibility into the OR schedule and the opportunity to release and request OR time, when needed, through a seamless, web-based process available through laptop/desktop computers and mobile devices. The exponential increase in total number of blocks released year over year - a 153% increase - illustrates the genesis of downstream benefits. Without the ability to easily release block time proactively, OR time would otherwise go unused without any opportunity to backfill that time with other cases, deflating OR utilization.

Dignity Health's OR teams opened up 2.6 million minutes of service system-wide by releasing block time via iQueue, with an average lead time of four (4) weeks ahead of the date of surgery. This increased access to patient care - especially in underserved communities - and reduced patient wait times: On average patients' surgery dates were identified more than three (3) weeks in advance of the date of surgery, and appointments were confirmed within 24 hours. This helped bridge the healthcare disparity gap in several of their communities of service by unlocking wider access to surgical care in a patient friendly and timely manner relative to previous methods that constrained access to care. This helped Dignity Health further champion its core value of inclusion. Comparing year-over-year results, Dignity Health more efficiently utilized staffed rooms and specialized ORs. This resulted in all Dignity Health divisions seeing significantly improved performance, and each realizing millions of dollars in increased revenue year over year.

Despite COVID-19's impact on operating rooms nationwide — disrupting the marketplace's demand for elective surgery and significantly deflating OR volume — Dignity Health was able to maintain block and prime time utilization metrics at 56% and 46%, respectively, year over year without a

decrease. This in itself is an accomplishment and testament to how Dignity Health has operationalized its core value of excellence as it illustrates their ability to maximize asset utilization through improved visibility into data analytics, OR performance monitoring, and scheduling optimization in an unprecedented crisis throughout the majority of calendar year 2020.

Stats

The 36 hospital locations in aggregate have achieved an additional contribution margin upwards of 14.5x ROI over the span of 18 months. All figures based May 2019 - December 2020 compared to previous YoY.

Additional Contribution Margin ROI: 14.5×

153%
Increase in blocks released

26
Days release proactivity

21%
Release fill rate

9%
Increase in staffed room utilization

0%
YOY change in prime time utilization despite COVID-19*

*Covid-19 has significantly impacted the healthcare industry nationwide and perioperative services, specifically elective case scheduling and block management which has diminished hospitals' and health systems' asset utilization potential.

NOVANT HEALTH®

Overview

Headquartered in North Carolina, Novant Health is a non-profit integrated healthcare network with 15 hospitals across multiple states that has 123 operatingrooms and more than 680 clinics offering advanced medical treatments. Utilizing purposeful innovation is fundamental to Novant Health's strategy of delivering patients an exceptional healthcare experience.

Problem

Prior to COVID-19, Novant Health was faced with meeting substantial growth targets to scale their organization. Opportunities for growth included:

- Attracting community surgeons within a competitive market;
- Enabling Surgeons to find open OR time; and
- Streamlining the OR scheduling process to accommodate new surgeons within existing capacity

As the pandemic advanced Novant Health, along with most hospitals across the country, faced a shortage of available operating room time, elective surgery backlogs, and low block utilization. Recognizing the highly competitive market, their system leadership needed a unified approach for making key decisions such as block time allocations, block release times, and streamlining operational improvements. System leadership was also seeking a credible "single source of truth" across all facilities for greater visibility and transparency into key metrics system wide.

Solution

In order to address needs for greater accessibility to operating room time as well as increased visibility and transparency into operating room utilization, Novant Health partnered with LeanTaaS and selected iQueue for Operating Rooms. The health system understood that deploying the software, despite the pandemic, was necessary and proceeded to remotely implement iQueue across its North Carolina facilities.

By deploying iQueue for Operating Rooms, Novant Health sought to increase surgeon engagement as well as the surgeon's accountability for use of their allocated time, add transparency related to data-driven decision-making, and build surgeons trust in the data. Novant Health's Surgical Services Leadership understood that the software and partnership would be a means to adopt a new, more surgeon centric framework for measuring OR utilization.

Results

In the seven months after launch, Novant Health experienced a 2.6% increase in case volume within existing capacity (despite the reduction in elective case volume driven by the pandemic) and a 3.8% increase in the number of OR minutes used across the system. They have also realized a 1% increase in both prime time and staffed room utilization and a 9% increase in volume from splitter surgeons across the most competitive market. Furthermore, Novant Health has increased surgeon engagement in their utilization: 55% of surgeons spend on average over 4+ minutes diving into data. Surgeons are also releasing block time that they know they will not utilize in advance of the auto releases, allowing other surgeons to claim the open time for more efficient patient access to the OR.

During the seven-month partnership with LeanTaaS' iQueue for Operating Rooms software and team, Novant Health has realized a 6.15X ROI, along with a greater breadth of engagement from surgeons and their practice administrators.

2.6%
Increase in case volume

3.8%
Increase in OR usage in minutes
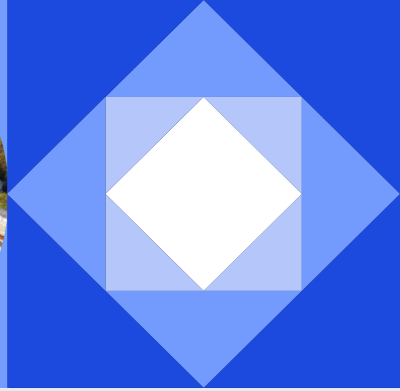
1%
Increase in prime time utilization

1%
Increase in staffed room utilization

55%
Surgeons engage in data, average 4:22 mins/session

9%
Increase in splitter surgeon volume

Overview

Portland-based Oregon Health & Science University – the only academic health center in Oregon – focuses on improving the health of all Oregonians and is dedicated to advancing the health sciences. OHSU's 16,000 employees concentrate on research to prevent and cure disease, on education that prepares physicians, dentists, nurses and other health professionals to succeed in an evolving health care environment, and on patient care that incorporates the latest knowledge and discoveries.

OHSU faced a shortage of available block time to allocate to new surgeons coming on-board at its South Operating Rooms (SOR) and Doernbecher Children's Hospital (DCH). Surgical services lacked visibility of available blocks; all block owners operated independently and there was no accountability for inefficient block owners. To compound matters, there was no "single source of truth"; unclear metrics and the lack of standardized release times for blocks fomented a lack of trust in the performance metrics by which surgeons were being evaluated. Before deploying iQueue for Operating Rooms, OHSU assumed – as many hospitals do – that the key to solving poor prime-time utilization patterns meant improving on their first-case on-time start delays and turnover times.

Solution

By deploying iQueue for Operating Rooms at SOR and DCH, OHSU hoped to improve access to the OR, increase the accountability of its surgeons for their use of their allocated time, and add transparency through a set of objective, data-driven performance metrics that eliminated ambiguity and helped surgeons develop trust in their key performance indicators. A major thrust of the effort was also to adopt a new framework for measuring OR utilization that focuses on Collectable Time – segments of time in which a case could have been scheduled but wasn't – and on scheduled downtime to drive OR utilization upwards.

Results

OHSU has experienced a 1% year-over-year increase in prime time utilization, a 5% increase in staffed room utilization, a 5% year-over-year increase in block utilization, and a corresponding 51% drop in completely abandoned blocks. Collectable Time has steadily decreased, as more surgeons now release time they know they can't use and other surgeons claim that open time for their cases. Now, for example, OHSU's Block Review Committees can put a block owner on notice and see dramatic improvement much faster than ever before. For example, a urology block owner was able to drop their collectable blocks from 6 to 3 in a matter of two months, using the data from iQueue to drive change in their scheduling practice. iQueue for Operating Rooms data now supplements existing infrastructure, helping perioperative leaders determine when to proactively close ORs when hospital is at high census.

As a collaborative partner with LeanTaaS, OHSU has taken an active role in working with the LeanTaaS team to brainstorm and develop new features, including an Availability Alerts management portal feature that automatically notifies surgeons when OR time matching their needs becomes available.

25
Additional cases per month in prime time (main operating rooms)
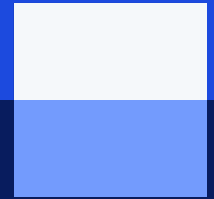
1%
Increase in prime time utilization

5%
Increase in staffed room utilization

5%
Increase in block utilization

51%
reduction in abandoned blocks

Overview

Baptist Health is a nonprofit, mission-driven healthcare system in the greater Jacksonville, Florida area. The system includes 5 Magnet-designated hospitals with 74 operating rooms and 14 endoscopy suites. Opened in 2005, Baptist Health Medical Center South includes 11 ORs and is consistently recognized both regionally and nationally for providing high-quality patient care.

When trying to increase access to Baptist South's ORs, surgical services leadership faced several challenges: The block schedule had limited open (first come, first served) time, making it challenging for surgeons without block time or needing additional time to access the OR. When there was time open and available in the OR, there was no easy way to advertise the time to surgeons and their schedulers. When trying to reallocate block time, surgical services leadership found it difficult to make defensible decisions using traditional methods of measuring block utilization.

Both surgeons and leadership had limited visibility into operational metrics. Acquiring reports often took a significant amount of manual work, and it was not easy for surgeons and leadership to see detailed data when desired.

Solution

Baptist Health Jacksonville partnered with the LeanTaaS team to implement iQueue for Operating Rooms initially across Baptist South's 11 ORs.

The Exchange module encouraged block owners to release time that they did not plan to use. Baptist could then advertise the newly open time using the "OpenTable" feature to maximize utilization of available OR time.

The Collect module allowed surgical services leadership to assess block usage in a surgeon-centric, defensible manner. They were able to identify opportunities to repurpose "Collectable" block time without negatively impacting surgeons' practices. The Analyze module gave both leadership and surgeons deep visibility into one source of truth for key operational metrics. Surgical services leadership used this data to identify specific opportunities to improve OR efficiency and take targeted actions. Surgeons were able to access their data anytime on both mobile and desktop, allowing them to better understand their OR usage.

Results

One year after launching iQueue in October 2019, Baptist Medical Center South realized the following improvements in access to OR time across 11 ORs when compared to the previous year.

11%
Percentage point increase in block utilization

8%
Percentage point increase in prime time utilization excluding the three month period impacted by COVID
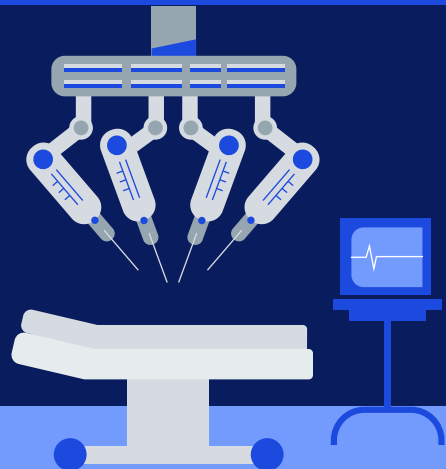
57%
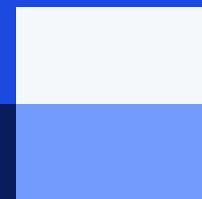Percentage decrease in abandoned blocks

25
Days average lead time for released time, allowing time for additional cases to be scheduled into released time

Baptist leadership saw the measurable value realized using iQueue, and iQueue has since rolled out to 74 ORs and 14 endoscopy suites in the Baptist Health Jacksonville system.
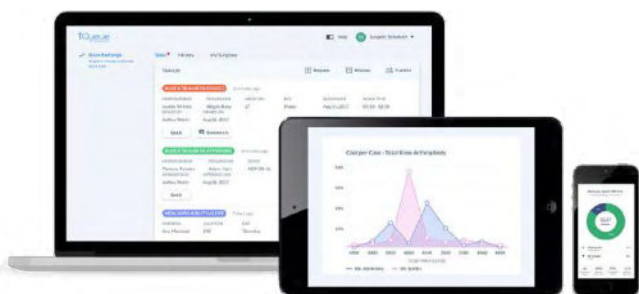
uchealth

Problem

UCHealth's hospitals and clinics have been trusted health care destinations for generations of Coloradans. Today, based on four consecutive years of recognition of its superior nursing processes and quality patient care from the American Nurses Credentialing Center and its ranking as one of the top 15 hospitals in the country by US News and World Report, UCHealth hospitals are uniquely positioned to meet the health care needs of families throughout the Rocky Mountain region and the entire United States.

Previous rapid improvement events focused on first-case-on-time starts and turnover times had not significantly improved utilization in a substantive, sustainable manner. Leadership knew their volume was likely to continue to increase before new ORs could be built. Feeling a sense of urgency and pressure to increase OR utilization with a scalable approach, UCHealth turned to LeanTaaS, a partner with whom they had worked with to improve operations in its 10 infusion centers.

Solution

UCHealth partnered with LeanTaaS to deploy iQueue for Operating Rooms' Exchange and Analyze modules throughout 25 inpatient and 8 outpatient ORs at their metro Denver location at University of Colorado Hospital. After seeing the impact those two modules had on improving their utilization, UCHealth extended its use of the solution to its other community hospitals and ambulatory surgery centers. iQueue for Operating Rooms' modular approach allows healthcare providers the flexibility to deploy modules individually or in any combination.

With access to data-driven performance metrics and the ability to release and/or request block time without an endless series of phone calls, emails, and faxes, UCHealth surgeons have enthusiastically embraced iQueue for Operating Rooms.

Results

47%
Median increase in blocks released per month
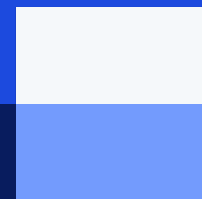

10%
Earlier block releases

4%
Increase in OR utilization

$400k
Estimated additional revenue per OR per year

uchealth

Overview

Based in Colorado, UCHealth consists of:

- 12 hospitals across Colorado, 4 ambulatory surgery centers
- 6,000 affiliated or employed providers; 28,000 employees
- 140 operating rooms
- 85,000+ procedures performed per year, 28,000+ surgical procedures in the southern Colorado region

UCHealth had previously adopted LeanTaaS' iQueue for Operating Rooms solution to improve operating room (OR) utilization, but needed further support to predict and communicate upcoming open block time among its surgeons and staff.

Challenges

UCHealth faced several challenges resulting from a lack of timely and transparent reporting of block time use.

- Surgeon schedulers routinely were not proactively releasing block time in a timely manner, and there wasn't enough to backfill open time, especially given a short auto-release period
- There was no room in the schedule to accommodate non-block holders or surgeons without enough block time to work through the patient backlogs that had resulted from postponing procedures during the pandemic
- Managers were unaware of when surgeons planned to not use their time and they were unable to prepare for room closures in advance to accommodate staffing
- Surgeons who were unable to manage their backlogs at the expected rate were further frustrated with last-minute unfilled ORs

UCHealth needed an effective solution that would let schedulers and surgeons know when there was likely to be block time that needed to be filled or released. This would assist to increase OR utilization and revenue overall, a goal critical to recovering from the aftereffects of the COVID pandemic.

Solution

To help run ORs efficiently in the face of staffing challenges and improve utilization overall, surgical leaders at UCHealth worked alongside their LeanTaaS partners to develop a tool called "Predictive Unused Block". This entailed a daily report, emailed early in the morning, showing daily statistical predictions for upcoming OR blocks that are most likely to be used 25% or less. For more convenient use by specific schedulers, the report is further broken down by date, location, block holder, and statistical confidence level (90%, 95%, and 99%) for the block owner to use less than 25% of their block. Using this information, scheduling supervisors, schedulers, and block holders could communicate effectively to either fill or release the unused blocks.

Results

Despite the adjustments involved in OR Scheduling connecting proactively with clinics regarding unused block time, the additional effort involved with implementing the Predictive Unused Block Report has yielded noticeable worthwhile results, including, over all relevant locations:

19
days average
proactive releases

49%
release fill rate

80%
OR utilization

Given these results, UCHealth hospital executives are now consulting with hospital leaders to help rebuild surgical services revenue and recapture deferred volume caused by case cancellations during the pandemic.

Introduction

Based in Kansas City, the University of Kansas Health System (TUKHS) is an academic medical center with multiple locations throughout Kansas. The health system's Kansas City operations has 52 operating rooms and performs over 35,000 cases per year across all service lines.

Challenges

Surgeons at TUKHS' main campus in Kansas City consistently struggled with gaining sufficient access to operating room time to perform their cases. Scheduling challenges were compounded by a high number of last minute add on cases and inefficient use of space and resources. Additionally, there were limited formal block management policies in place to best utilize OR time or to find unused/underutilized time. Without access to credible, defensible data to support block reallocation decisions, OR leadership struggled to reclaim and repurpose unused block time. Furthermore, leadership and department chairs did not have access to the data and thus little visibility into the root causes of access and utilization problems.

Goals in implementing LeanTaaS' iQueue for Operating Rooms

TUKHS selected iQueue for Operating Rooms to gain access to a powerful and usable window into their block utilization and other key performance indicators and to provide decision makers with easy access to the metrics that matter. iQueue would enable them to identify open time in the OR sooner, show which block owners have excess allocation, and proactively zero-in on opportunities for further operational improvement. Access to the data, from a "single source of truth" that all stakeholders could trust and rely on, would help the surgical department build structure around block management practices and policies. Using these insights from iQueue, TUKHS could increase OR utilization, leverage new block reallocation opportunities to recruit surgeons, and improve efficiency in OR workflows.

iQueue data would also help address another priority for TUKHS leadership — enabling OR leadership to develop stronger relationships with surgeons and department chairs. These stakeholders could engage with department metrics and together, fostering better communications and transparency as they worked toward clear common goals. Giving surgeons access to their own data would also motivate them to improve their own metrics, improving satisfaction as they saw immediate results from their choices around usage.

> "Within one year of implementing iQueue, we were able to increase overall block utilization by 20% percent and primetime utilization by 4.8% and that's with the 7% reduction in available rooms… that indicates that we're using our space a lot more efficiently."

— **Megan Eubanks, Senior Director of Business Operations of Perioperative and Procedural Services at The University of Kansas Health System**

Results

After one year of using iQueue for Operating Rooms, TUKHS saw the following results:

20% ▲
increase in block utilization

4.8% ▲
increase in primetime utilization

8% ▲
increase in surgical volume despite a 7% decrease in available capacity

Increased fluidity of time and greater access to the OR

98% ▲
proactive manual releases and transfers of time before the auto-release deadlines

27
day average release/ transfer proactivity

100%
of surgeons are receiving personalized performance updates via email and/or text message and more than half of them are accessing the data on a regular basis

TUKHS has leveraged LeanTaaS' perioperative domain expertise to create appropriate block policies incorporating "Collectable Time" as the given metric to right size blocks. TUKHS plans to put the iQueue for Operating Rooms Collect tool into the hands of department chairs, so they can independently manage block allocation and be able to continue improving utilization with their own departments.

Overview

Parkview Medical Center is a community hospital based in Pueblo, Colorado, offering general acute healthcare and behavioral health specialty services.

As a private, non-profit organization, Parkview is licensed for 350 beds and provides a full range of healthcare services including the region's only certified and verified Level II Trauma Center as well as the region's first certified Stroke Center.

Parkview Medical Center is the leader in cardiac, women's, emergency, and neurological services as well as behavioral health programs. As a vital healthcare source, Parkview's service area includes Pueblo County and 14 surrounding counties, which together represent 350,000 total lives.

Problem

Parkview Medical Center faced a series of challenges that contributed to decreased efficiency in their operating rooms. These included:

- Inaccurate performance metrics due to non-standard EHR workflows. The process of compiling and validating manual reports was far too cumbersome, and as a result, there wasn't a credible set of KPIs that could be used to make decisions
- No existing mechanism to right-size block time. Block utilization data was not credible, and prevented the OR Committee from being able to identify lowperforming block owners. This made it difficult to find additional OR time for physicians with growing practices, as well as for new physicians
- Limited access to available open (first come first serve) time that required several back and forth phone calls with OR scheduling. This would result in affiliated surgeons potentially losing potential patients to other neighboring markets

Solution

Parkview Medical Center has always been a leading healthcare innovator in the Pueblo community, and in searching for an innovative solution to the problems they faced in their operating rooms, they partnered with LeanTaaS to deploy iQueue for Operating Rooms.

They initially launched the product in February 2018 for the 12 ORs on their main campus and saw the following results in their first year using iQueue:

15
blocks per month released

11
blocks per month requested

21
day average block release lead time

20%
decrease in minutes from entirely unused allocated blocks

Each of iQueue for Operating Rooms's three modules has provided tremendous value for Parkview. The Analyze module has, for the first time, given the leadership team timely, actionable metrics based on credible data. Given the way that Parkview had set up their EHR, they weren't able to extract meaningful data from it. But through working with

the iQueue team in the implementation phase, Parkview is now able to capture their key performance metrics as intended, and are able to understand the true nature of their OR performance.

The Collect module allowed Parkview to establish an independent block committee for block management, and gave them a powerful, surgeon-centric metric for right-sizing block allocation in the form of collectable time. With collectable time, Parkview was able to make data-backed decisions about which block owners they should take time away from in a way that didn't impact existing case volume.

Finally, the Exchange module has provided visibility into the inventory of open time in the OR which has made it far more liquid and accessible. iQueue has significantly streamlined the scheduling process at Parkview, which has been a huge satisfier to both the physician and patient populations. In the words of Dr. James Caldwell, Medical Director of Surgical Services at Parkview: "Exchange has made the surgeons so happy, and we're getting patients in faster, so it has increased surgeon satisfaction, increased patient satisfaction, and has made the whole scheduling process outside of normal block time smoother. It has fixed so many problems and streamlined our systems so much."

Parkview was so happy with the results of their initial implementation that they decided to expand the scope of the tool to serve their outpatient and endoscopy centers, bringing the total number of ORs using iQueue for Operating Rooms from 12 to 20. The partnership between LeanTaaS and Parkview is poised to be a success in the years to come.

OhioHealth

Problem

OhioHealth is a family of not-for-profit hospitals and healthcare facilities in Central Ohio. Serving patients since 1892, Riverside Methodist Hospital in Columbus, Ohio, is a 1,059-bed teaching institution and the largest hospital in the OhioHealth system. The flagship hospital shares the OhioHealth mission "to improve the health of those we serve". It is recognized locally, regionally and nationally for quality healthcare and consistently ranked one of the nations best hospitals.

In trying to increase access to the operating room and accountability for the use of allocated block time, the Surgical Services Leadership Team had to consistently balance surgeon satisfaction with a focus on achieving operating metrics (volume, utilization, growth). The leadership team perceived there to be significant operating capacity and unused block time, but had little insight into where the opportunities existed. Furthermore, previous block management approaches, based on broken metrics like block utilization, made it challenging to hold surgeons accountable for unused block time. In order to drive the right outcomes at Riverside, the leadership team knew they needed a solution with embedded predictive and prescriptive analytics that would help transform core operational processes.

Solution

The Surgical Services Leadership Team partnered with LeanTaaS to implement iQueue for Operating Rooms. iQueue's Exchange and Collect modules helped transform traditional business operations at Riverside to drive increased access and enhance accountability for the use of allocated block time:

Exchange identified and exposed the inventory of open time to surgeons and their clinic schedulers. Based on historical booking patterns, Exchange was able to identify surgeons who had not booked cases into their block and proactively remind them to release potential unused time. After inventory was exposed, the "OpenTable" feature allowed for immediate access to available operating time for surgeons who did not have allocated block or needed additional operating time.

Collect provided the leadership team with a surgeon centric metric to evaluate the performance of all block owners. The module mined patterns of OR usage by block owner and identified portions of time that could truly be repurposed or "collectable". It allowed the leadership team to repurpose unused block time without impacting surgeons existing case volume.

Results

Less than 6 months into the partnership, OhioHealth Riverside Methodist Hospital reported both increased capacity, access and accountability.

211,000
Minutes of capacity released through exchange

Equal to more than 422,000 minutes of reclaimed capacity annualized

62,000
Minutes of operating time requested through exchange

- 50% of top beneficiaries were surgeons without block time
- Assuming a 60% utilization, 62k minutes corresponds to ~$5.58 million in revenue

130
Number of blocks identified using collect

Opening a strong opportunity to increase share of wallet with non-employed physicians

12
Number of blocks a month repurposed using collect

Creating opportunity to re-allocate to new and existing surgeons

OhioHealth

Overview

The only full-service adult hospital in downtown Columbus, OhioHealth Bone and Joint Center at Grant Medical Center is nationally recognized for its delivery of quality trauma and surgical care, and performs 20,500 surgeries annually across its 29 ORs. 10 of these ORs belong to the OhioHealth Bone and Joint Center at Grant Medical Center, which performs 6,500 of these surgeries in an ASC look-alike model. In performing so many cases in a busy urban setting, while maintaining its high standard, OhioHealth Bone and Joint Center in particular struggled with a number of operational challenges.

Problem

Like many ORs, the center was subject to inefficient scheduling practices, staffing resource constraints that impeded scheduling even further, and poorly informed management of surgical block time due to data availability.

Specifically, when making surgical bookings, the center used surgeon requests as their reference point for case length times, which often did not account for the actual case time that would be required in practice. This practice led to highly inaccurate case times and surgeons booking well past their allotted blocks, causing staff burnout and excessive overtime. To mitigate this, the center started to use their EHR-provided case length averaging tool, which did increase their case length accuracy (CLA) somewhat. But the center still had further opportunity to achieve more precise CLA, as well as improve the OR scheduling process overall.

Solution

To improve scheduling efficiencies, the center went live with **iQueue for Operating Rooms** in September 2022. iQueue's Exchange module supported a highly visible marketplace for OR time, allowing schedulers to release and claim time efficiently, and the Case Scheduling module helped fit cases more efficiently into the time available. To provide stronger data overall, the center also leveraged the Analyze module, so stakeholders could easily find and access reliable performance information, track trends and identify opportunities to grow.

Several months after the initial go-live, the center also decided to give clinics full visibility into how long their cases were truly taking, and to do so deployed iQueue's CLA function. After the center requested this feature in December 2022, a tip sheet was sent to clinic schedulers informing them on the new field being added to their workflows, and LeanTaaS then implemented the CLA tool in January 2023. This immediately gave clinics even better insights into how much time their cases took, and also a clearer understanding of actual staffing needs in the OR.

Results

Within two months of deploying iQueue's CLA tool, the center achieved:

6% ▲
Increase in CLA

20% ▲
Total increase in CLA since prior to iQueue go-live

A total CLA of close to

70%
accurate, within a 15-minute window

Taking PAT Paperless with iQueue for Operating Rooms Mount Nittany Medical Center

Overview

Mount Nittany Medical Center is a 260-bed acute care facility offering medical surgical, diagnostic and community services. Located in State College Pennsylvania, Mount Nittany Medical Center is part of the Mount Nittany Health system and serves the community throughout central Pennsylvania.

Problem

One of Mount Nittany Medical Center's goals in implementing iQueue for Operating Rooms was to move completely paperless. iQueue's Scheduling feature offered this as a built-in benefit directly out of the box. However, the Preadmission Testing Department (PAT) relied on a constant stream of paper faxes to kick off their workflow downstream of OR Scheduling for over 30 years.

In anticipation of upcoming construction projects, administration moved towards a paperless PAT environment as quickly as possible in order to repurpose the existing footprint. The department's substantial space housed employees and significant amounts of paper filing systems in order to accommodate each patient encounter within the department. The goal was to reduce the department's physical footprint by introducing paperless PAT, move a majority of staff to off-site remote work, and then repurpose the prime real estate space located immediately adjacent to the lobby of the hospital.

Solution

After reviewing the existing workflow for the PAT department, the LeanTaaS team recommended granting PAT staff access to Scheduling. This allowed the PAT department to receive notifications for each case scheduled via OR Scheduling, access all relevant case details associated with each patient via Scheduling, and initiate a completely paperless system. In addition, PAT now receives notifications when case details or additional comments are added to a specific case via iQueue and PAT stays up to date with recent scheduling activity in tandem with OR Scheduling.

By implementing iQueue for Operating Rooms, the PAT department's scheduling went to 100% cases processed electronically on launch day and the department moved some PAT functions to an off-site location freeing up key real estate next to the hospital's front door for shared and more convenient outpatient lab and PAT services.

Results:

13K
cases processed electronically through iQueue within the 1st 8 months after launch

All planned procedures 100% electronically processed via iQueue

Outpatient Lab Services conveniently located in the hospital lobby previously occupied by PAT department

GUNDERSEN
HEALTH SYSTEM®

Overview

Before a merger with Bellin Health system expanded its footprint in late 2022, the Gundersen Health system served patients across Wisconsin, Minnesota, and Iowa through its seven hospitals, 33 clinics, and 23 ORs. The system's flagship, 325-bed LaCrosse, Wisconsin-based Gundersen Health Hospital, delivers a holistic range of health care services to adult and pediatric patients.

Problem

Amid greater staffing challenges faced throughout the health system in the first half of 2022, Gundersen's perioperative department further experienced capacity problems that hindered the full and efficient use of operating room (OR) time. Leaders, surgeons, and staff lacked real-time visibility into key data they needed to make actionable decisions. Due to the nature of the block build, surgeons' and service lines' real use of assigned block time was not possible to understand, nor was time that could be released and repurposed. As a result, open time for elective cases were severely limited. In these circumstances surgeons were reluctant to release their block time manually, and compounding this issue, autorelease deadlines were shorter than necessary. Scheduling whatever open time was available involved frequent back-and-forth phone calls and faxes between the OR and clinics, with no true audit trail to show the history of releases and requests. Similar problems persisted in accessing resources such as surgical robotics. With no actionable tools available to right-size block assignments and free open time, it was difficult to make decisions that improved OR performance metrics.

Solution

To address these problems by providing visible data and tools to act on these opportunities effectively, Gundersen launched the AI-based iQueue for Operating Rooms solution in May 2022. The Analyze module in iQueue provided a single

source of truth for up-to-date data that all OR stakeholders could access. It delivered weekly relevant notifications to surgeons and monthly high-level performance reports to leaders, who could then take informed action, such as extending autorelease days where appropriate. The Collect and Allocate modules offered clearer visibility into true block utilization, identified "Collectable" unused time that could be repurposed, and made recommendations on how to right-size block allocation based on historic usage. Leaders used this information to create accurate schedules built on rightsized block. iQueue also sent release reminders to encourage surgeons to release block and provided an open marketplace to facilitate an easy exchange of time across the OR. The platform streamlined the scheduling process overall, so schedulers could view and request open time and track all OR transactions automatically. With the new protocols and practices in place as of October 2022, utilization improved, including noticeably in the robot room, and existing staff were empowered to achieve success using limited resources.

Results

On average in Q4 2022 compared to Q4 2021, Gundersen achieved:

8%
increase in prime time utilization

9%
increase in staffed room utilization

8%
increase in block utilization

14%
increase in prime time robot utilization

76%
increase in manually released minutes

Overview

Part of the larger Hartford HealthCare, the Bridgeport, Connecticut-based St. Vincent's Medical Center (SVMC) comprises a 473 bed community teaching hospital, along with an inpatient psychiatric facility, an affiliated large multispecialty provider group, and St. Vincent's Special Needs Services, all staffed by 3,500 clinicians and associates in total. In 2021, SVMC performed 3,000 inpatient surgeries and 5,000 ambulatory surgeries.

Problem

In performing a high volume of surgeries for the surrounding community, SVMC's operating rooms (ORs) faced numerous challenges in utilizing time and space efficiently, and using supply of ORs to meet demands. The OR schedule was 99% blocked, an issue exacerbated by surgeons not manually releasing their unused block time. Open time was frequently held for specific surgeons via sticky notes in the schedule, before ultimately going unused. These habits, driven by a fear of not getting time back when needed, exacerbated ongoing low OR utilization and prevented elective cases from being booked outside allotted block time.

Adding to this, surgeons and their schedulers had very limited visibility into the OR schedule to see what open and block time actually was available, leading to constant back-and-forth phone calls and faxes to send case information and attempt to book time. The manual processes contributed to a problem with OR transactions like time requests and releases not being properly tracked.

These issues contributed to the overall struggle OR leadership faced with insufficient and inaccurate data, which failed to support effective decisions on appropriate autorelease deadlines and block allocation. Leadership was forced to calculate data manually, and surgeons, staff, and leadership tended not to trust the data that was available. In these circumstances, surgeons and leadership were unable to identify truly repurposable OR time, prove the need for additional time, or effectively repurpose block time to create additional access to the OR. SVMC metrics thus showed block and OR utilization that was lower than ideal.

Solution

To address the underlying problems, SVMC adopted LeanTaaS' iQueue for Operating Rooms on August 30th, 2022. The solution offered full visibility into open and available block time within the OR, so that clinic schedulers could see and request both open and blocked time through a single platform, as well as send their case information through the application. iQueue supported leadership in creating standardized definitions for all operation metrics and provided a single source of truth for reliable data, which became trusted across the organization. Serving as a unified marketplace for time and efficient scheduling tool respectively, iQueue's Exchange and Case Scheduling modules streamlined the scheduling process, reduced opportunities for human error when transcribing case request information into the EHR.

At the leadership level, iQueue's Collect and Allocate module supported fruitful discussions and productive actions on block allocation by presenting accurate, actionable and surgeon-centric data. With these tools, surgical leaders could evaluate opportunities to repurpose eligible time, and truly understand metrics like how well surgeons were currently using their time, who needed additional time, and what time would work best based on historical booking patterns. They also leveraged release reminders through iQueue, to encourage surgeons to release block time they did not plan on using to create additional access to the OR for surgeons with demand. These actions created a fluid, open marketplace for open OR time and reduced unused time being held by surgeons. Leadership has also used data from iQueue's Analyze module to make decisions on extending the autorelease deadline where appropriate to create more open time sooner.

By making data more accurate, visible, and useful, iQueue for Operating Rooms empowered SVMC to improve utilization and better match demand for OR time with supply.

Results

In the first four months after launching iQueue for Operating Rooms (September - December 2022), compared to the same period of the previous year, St. Vincent's Medical Center achieved:
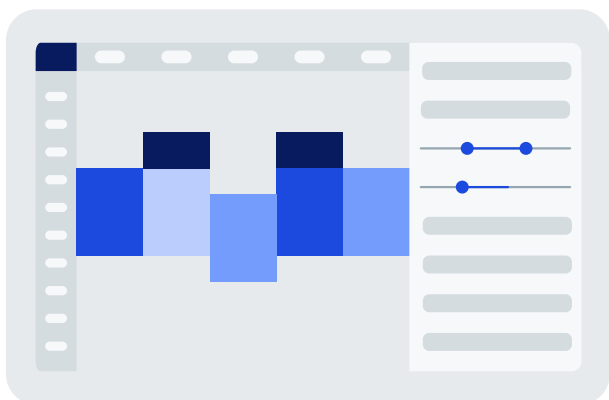
7%
Increase in prime time utilization

5%
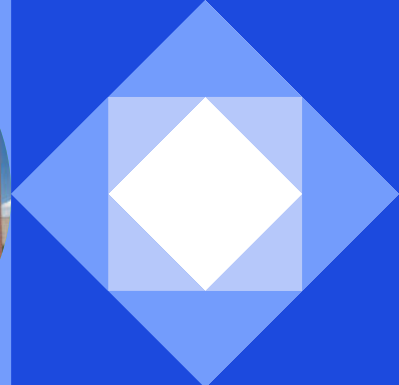Increase in staffed room utilization

6%
Increase in block utilization

124%
Increase in manually released minutes

A LeanTaaS Case Study

WakeMed ✦

Overview

WakeMed Health & Hospitals is a 970-bed, private, not-for-profit healthcare system based in Raleigh, North Carolina, with three hospitals located throughout the surrounding community. The flagship Raleigh Campus is a Level 1 Trauma Center and performed 17,000 Cardiac Cath & EP procedures in 2022.

WakeMed's perioperative areas have been leveraging iQueue for Operating Rooms since October 2019. After noting how iQueue for Operating Rooms streamlined general perioperative scheduling efficiencies, leading to a 15% gain in staffed room utilization and an ROI of 11x*, the Invasive Cardiology team implemented the same solution in the Cath and EP labs for Raleigh Campus and Cary Hospital.

Problem

Before implementing iQueue for Operating Rooms, the Invasive Cardiology teams were receiving requests for lab time via email, fax, and phone. There was no auditable methods to manage requests into open time, and scheduling teams were often challenged. Similarly, physicians' offices did not have visibility into availability of open time, leading to numerous time-consuming discussions to coordinate scheduling. This limited availability of open time led to cases often being scheduled last minute and running well into the evening. The process of scheduling a single case involved variable, indefinite efforts from multiple personnel, contributed to staff burnout and lengthening patient wait times.

Solution

In March of 2021, WakeMed implemented iQueue for Operating Rooms to streamline scheduling within their Invasive Cardiology rooms. At this time all requests for open time within WakeMed's Cath and EP labs were consolidated within the iQueue platform. This provided schedulers with an auditable queue for all requests, while also giving offices visibility into available time that can be requested, therefore reducing denials. Additionally, by providing insight into available time, physicians were able to more proactively and efficiently schedule cases, giving ample opportunity to increase productivity and perform additional procedures.

*ROI calculated by comparing the additional net revenue from backfilled cases enabled by proactively released OR block time against the cost of the solution

Results for Cath & EP Labs

Top 10 physicians contributed

21% ADDITIONAL CASE MINUTES

in the first year of using iQueue compared to fiscal year 2019 (pre-COVID and iQueue productivity benchmark)

Scheduling lead time increased

6 DAYS

in the year post-launch for the EP Lab, enabling additional predictability in the schedule

What your colleagues are saying

> " iQueue is a far more scientific way of managing OR capacity and creating access to OR time, accountability for block time, and transparency into operating metrics. OHSU deployed iQueue for Operating Rooms in October 2018. From start to finish, the process took less than eight weeks. On day one of the go-live, there were more than 100 transactions to request and release OR block time. In fact, we have unlocked more OR time within the first week of using iQueue than we had in an entire year. The changes to our core processes for release and request, block rightsizing, and transparency into the metrics is exactly what we needed. This is the future of OR capacity management.

Dio Sumagaysay
Associate Chief Nursing Officer

> " The tools streamlined surgeons' and their offices' abilities to find open time and how open time was advertised, and made it very easy for surgeons to proactively release any block time that might not be needed far enough in advance to where it can be efficiently filled by another surgeon. This has not only helped our existing surgeons eliminate their case backlogs, but also has provided ease of access to open time for surgeons who were looking to bring new or more cases to MultiCare.

Dr. Michael Myer, MD, MBA
Cardiothoracic Surgeon and Physician Executive

> " We are excited to utilize iQueue for our operating rooms because it gives us access to data that we previously did not have. iQueue enables us to have a better understanding of our true capacity and where we have opportunities to optimize our operating room utilization.

Leslie Barrett
President and Chief Operating Officer

> " Within one year of implementing iQueue, we were able to increase overall block utilization by 20% percent and primetime utilization by 4.8% and that's with the 7% reduction in available rooms... that indicates that we're using our space a lot more efficiently.

Megan Eubanks
Senior Director of Business Operations of Perioperative and Procedural Services at The University of Kansas Health System