



FEATURE SPOTLIGHT

How OHSU Alleviated Staffing Challenges in the OR

Key Results:

20 Hrs/Wk

Estimated to be saved by service line coordinators at OHSU CHH

5 Hrs/Wk

Estimated to be saved by charge nurses and nurse managers at OHSU CHH



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Introduction

Located in Portland, OR, Oregon Health and Science University's (OHSU) [Center for Health and Healing \(CHH\)](#) comprises 15 ORs and employs 91 RNs and surgical techs. CHH shares some staff with two other OHSU facilities, Doernbecher Children's Hospital and South Main OR.

The service line coordinators (SLCs) at CHH focus day-to-day on creating the next day's OR assignments, determining the staff best suited to accommodate the surgical schedule, based on factors such as experience, training opportunities, staff and surgeon preferences and requests. With guidance from nurse managers and education coordinators, they take responsibility for providing perioperative nurses and surgical technicians with cross-training and development opportunities. This is a key focus area that promotes patient safety, staff flexibility, and satisfaction.

When assigning staff to cases and roles, SLCs consider which assignments would build most effectively on staff member's skills and goals. Their knowledge of staff members' backgrounds is essential to fostering a flexible staff that could provide maximum coverage, while maintaining staff and surgeon satisfaction and retention.

The SLCs have always had the knowledge, skill, and expertise to create optimal assignments, advance staff cross training opportunities and ensure patient safety. However, surgical leadership recognized the opportunity to perform this work more efficiently and with less cognitive burden through the use of centralized digital tools featuring complete and up-to-date staff experience.

Staff Assignment Challenges at CHH

A Manual, Time-Consuming Process

Prior to piloting the Daily Roster, part of the new Staff Planner module in LeanTaaS' AI-powered [iQueue for Operating Rooms](#), the SLCs had to follow a multi-step, manual, and duplicative process when building the next day's staff assignments. Nurse managers and charge nurses had to contribute manual work as well.

The process for the **SLCs** entailed:

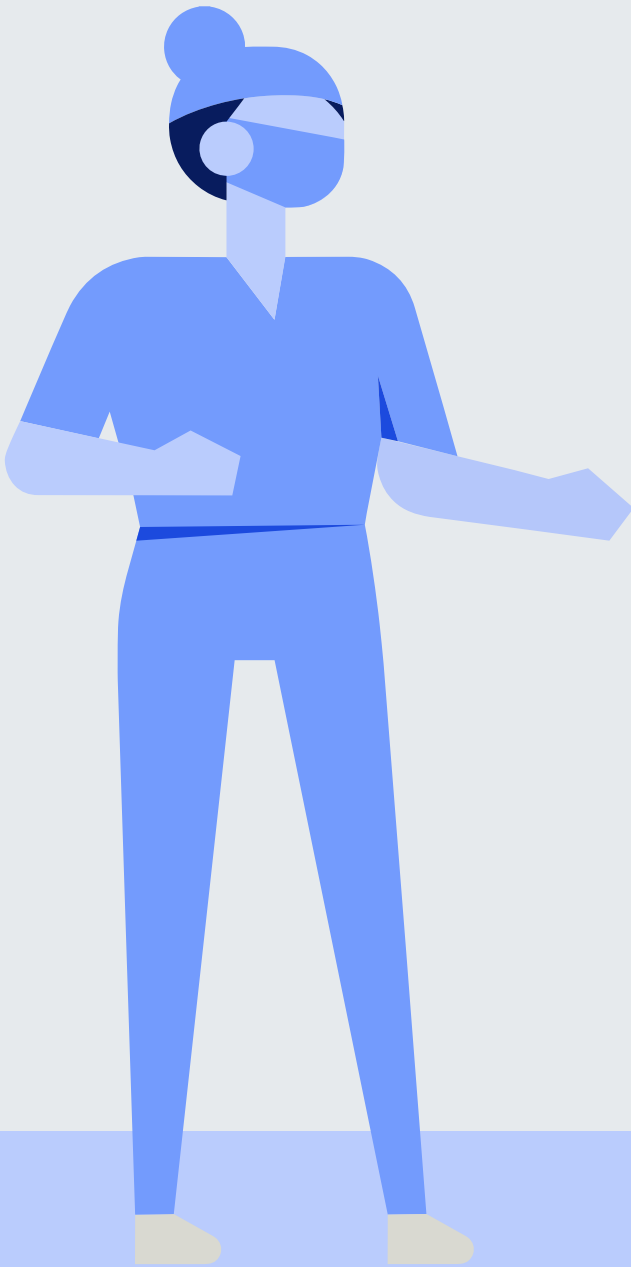
1. Receiving a paper roster of available staff, for the next day. A health unit clerk created the paper roster manually, based on the posted staff schedule with any changes incorporated
2. Reviewing the next day's surgical schedule in the EHR to confirm which OR cases were scheduled in which room
3. Assessing available staff via the paper roster and confirming based on their own existing knowledge who is qualified for which room, considering experience, preferences, and other factors
4. Asking staff if they had experience in certain areas, if the staff were not known to the service line coordinators or if there were questions about specific experience
5. Making OR staff assignments and updating them on the paper roster
6. Indicating which staff are still available for break and relief coverage
7. Submitting the sheet to the charge nurse

After these steps were completed, the **charge nurse** would take on additional manual work to socialize the staff assignments throughout the OR:

1. Transferring staff assignments from the paper sheet into the EHR scheduling system
2. Communicating assignments to staff

If SLCs or nurses obtained new information about staff experience that impacted where staff could be assigned, assignments would be manually updated on both the paper roster and the EHR. At times, this could not be done until the day of surgery, and often required other assignments be changed to accommodate the updates.

The extensive process involved time-consuming double data entry, delays completing assignments while confirming staff experience, and extra manual work required to communicate staff assignments. Without a centralized tool for assignment, the SLCs, nurse managers, and charge nurses spent up to an hour each day on OR assignments.



Staff Assignment Challenges at CHH (cont'd)

Siloed Knowledge About Staff Experience

Exacerbating the effort involved in staff assignments, the SLCs also did not have access to each staff member's experience with different procedures and surgeons while making assignments. They mainly relied on their own institutional knowledge of staff, and could for the most part easily assign staff members whose experience they knew well.

When SLCs had to assign staff they were less familiar with, however, they lacked insight into the staff members' experience and were less equipped to make optimal assignments. They could also have similar issues with known staff. Without insight into the full picture of their experience, SLCs were less able to proactively identify training opportunities to further those staff's professional development, increase cross-trained staff, and promote staff & surgeon satisfaction. If the staff or surgeons questioned their choice of assignment decisions based on experience level, SLCs were often unable to provide data to justify them.

To assign unfamiliar staff, SLCs would often ask for guidance from nurse managers. Nurse managers and educators have long maintained a spreadsheet that broadly categorized staff comfort levels with certain skill areas, and tried to ensure it was manually updated every six months from subjective input sourced from each staff member individually. While the sheet did support some knowledge needed for assignments, it was not always up-to-date with timely information, nor granular enough to confirm experience for specific procedures. Updating the sheet entailed an added manual task.

All these processes led to additional time spent making appropriate staff assignments, as well as manual input from the charge nurse and nurse managers to confirm assignment decisions.

Assigning Floating Staff and Orientees

SLCs were faced with further challenges when assigning staff who were floating from another operating rooms sites, as those staff were completely new to them. They had to individually confirm experience with each floating staff member before assigning them. Similarly for orientee staff, if the orientation coordinator was not available to guide their assignments, SLCs had to either make a best guess assignment or wait until they had discussed with the staff member, often not until the day of surgery, to ensure staff were not placed in assignments that were not appropriate for them. These

processes caused delays in completing assignments for the day, and could prolong orientation advancements.

Overall, the assignment workflow at CHH led to prolonged time and effort spent creating staffing assignments and took time away from supporting staff and overseeing patient care. These processes did not support efforts to utilize OR staff efficiently nor help stakeholders provide staff with opportunities for their career development and growth.



CHH's Staffing Assignment Solution

iQueue for Operating Rooms Staff Planner - Daily Roster

[OHSU had already partnered with LeanTaaS to achieve OR efficiencies](#) using the AI-powered [iQueue for Operating Rooms](#) solution. Due to this relationship, CHH was able to pilot the new [iQueue for Operating Rooms](#) Staff Planner Daily Roster to streamline OR staffing operations and instantly leverage insights on staff experience.

Using iQueue's Daily Roster, SLCs have streamlined the multi-step assignment process. The tool provides a "single source of truth" for the staff roster, OR assignments, and staff experience. It has eliminated multiple steps in the workflow, eliminating duplicate data entry and automating communication to staff. SLCs have been able to cut daily time spent on staff assignments in half, make assignments confidently for all staff, and accelerate employee cross-training and meet orientation requirements. Additionally, the partnership across SLCs has improved, with a shared purpose of developing staff fostering a new sense of collaboration.

With full insight into staff experience provided by iQueue's Staff Planner, including orientees and staff floating from other facilities, SLCs as well as nurse managers and charge nurses save time reduce back-and-forth communication and create optimal staff assignments faster, with less iterations in preparation for the day of surgery.

Nurse managers reference the Staff Planner's recommendations as a quick and easy snapshot of staff's evolving experience and comfort level, rather than relying entirely on the manually updated spreadsheet. iQueue also gives SLCs visibility into the most up to date case history of staff floating from hospitals, as well as experience levels of orientees, to enable them to assign them confidently and without delay. During the project, nurse managers were able to recognize a gap in robotics experience. By surfacing case history, nurse managers easily identified staff with less experience and were able to assign them to future cases with more experienced staff. This streamlined workflow rapidly increased the robotic competency and strengthened the pool of available resources to staff robotic cases.

After using iQueue's Staff Planner for six months, SLCs, charge nurses, and nurse managers saved significant time in creating optimal staff assignments, with minimal manual input. They also used the solution to share up-to-date, informative resources on staff's backgrounds and revealed the fastest paths to support staff development and patient safety.





Impact & Results

Service line coordinators at CHH are saving an estimated total of **20 hours per week** using iQueue Staff Planner's Daily Roster tool.

“ We now have instant access to comprehensive case histories for all our staff, including those floating from other hospitals...As a result, we easily and confidently make appropriate OR assignments, even with staff we may not be as familiar with...having full visibility into case and experience details has accelerated our cross-training and orientation by enabling us to quickly identify training gaps and assign cases strategically to broaden the pool of expertise.”

— Service Line Coordinator

Charge nurses and nurse managers are saving an estimated **5 hours a week** due to the streamlined assignment workflow iQueue Staff Planner provides.

“ Charge nurses are saving several hours a week...We no longer have to copy the assignments from paper into the EHR, and spend less time revising initial assignments since SLCs have the information they need to support decisions around optimal assignments from the beginning...Our charge nurses and nurse managers can directly reinvest the time previously spent on manual staffing into meaningful, crucial tasks such as staff support, patient care, and operational workflows.”

— Nurse Manager

What's Next for OHSU and iQueue Staff Planner

Given the success of the pilot at CHH, OHSU is collaborating with LeanTaaS and expanding the Staff Planner module to additional OHSU locations to standardize staffing workflows and provide a better experience to a broader team of SLC and RN leadership.

Additionally, as a pilot site for the Staff Planner module's Daily Roster tool, CHH has been able to provide input into future enhancements of the solution involving management of staff experience more comprehensively and efficiently. CHH will soon be testing product enhancements to proactively coordinate orientation and cross-training for drive on-time completion of orientation, a larger pool of cross-trained staff, and reduced premium labor spend to fill gaps in the schedule. CHH leadership believe staff will benefit by completing orientation as well-rounded and confident contributors due to the comprehensive experience proactively assigned to them during their training period, and by continuous and proactive management of professional development goals.

About iQueue for Operating Rooms Staff Planner

iQueue's Staff Planner module leverages the OR's historic data to forecast future room utilization, identify case specific staffing needs, and highlight staffing gaps or variances for the upcoming days, allowing perioperative leaders to align staff to demand proactively to ensure the day runs smoothly.

Within the module, the **Daily Roster** utilized by CHH is a digital daily assignment tool that supports efficient and informed staff OR assignments, supported by integrating staff case history into the assignment workflow, providing recommendations for optimal assignment, and proactively identifying training opportunities. The module's **Staff Forecast** shows demand-based staffing needs for the upcoming days and weeks, using AI predictions for future demand that consider case volume, surgeon booking patterns, likely case lengths, and even unique staffing needs for specific cases. Perioperative leaders can use this information to make proactive decisions to align staff to this demand so that volume is executed most efficiently, and provide staff with predictable, consistent workloads.

