



# It's Time to Bring Perioperative Scheduling into the 21st Century

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Routine management decisions made in hospitals each day impact the lives of physicians, nurses, and patients. Seemingly straightforward decisions may subtly undermine hospital finances. Staff morale, and even patient satisfaction, may also be gradually nudged downward.

Finding new ways to make these decisions more transparent and efficient could ameliorate or even reverse these effects.

OR scheduling is one such everyday task. But with so much riding on the schedule, changing the way it is managed can seem risky – even if those changes could improve efficiency or communication. After all, any error that results in needed skills being unavailable in the OR could have serious consequences – for patient access to procedures, or even for patient safety.

With so much on the line, it only makes sense that scheduling decisions for the OR be handled personally by very experienced nurse managers – but that doesn't mean they have to do the job the same old way. Up-to-date technology can help them do their jobs faster and more accurately – without reducing their control over the process. It's a high-impact investment with benefits that reverberate throughout the hospital.

Scheduling software doesn't replace the critical role of skilled managers – it bolsters it. By speeding up analysis and decision-making, software can make scheduling easier, fairer, and more transparent. Automating the process can give the people who manage OR scheduling more time for other critical tasks. And it can make sharing scheduling information much easier, too.

It's possible now because mobile, cloud, and security technologies have finally been effectively applied to the problem of OR scheduling. The solutions can have transformative effects on OR productivity, morale, teamwork, patient access, and hospital finances.

## **Interdependencies make OR scheduling more complex**

The primary focus of perioperative scheduling is necessarily narrow. In order to keep the OR up and running, managers assign the available resources (human and technological) as required. Although it must be done precisely, OR scheduling might seem almost routine – except for the need to adapt to changes that may be required at any moment. Procedures that take longer than planned, a surgeon stuck in traffic, and emergencies that reshuffle priorities are all common events that can affect the OR schedule. When disruptions

like these happen, managers need to update the schedule on the spot.

Managers are used to coping with these unplanned changes, but their effects reverberate. Staff, for example, might be unnerved when they've been unexpectedly reassigned to a different procedure; when they feel increased stress, managers feel it, too. Surgeons are also understandably frustrated when their schedules are changed at the last minute.

The impact may even extend beyond the OR. Patients and their families are inconvenienced when surgeries are postponed. What's more, when unexpected events lead to rescheduling, the missed OR time is lost forever. These lost opportunities are costly to the hospital, because much of the overhead is incurred whether surgeries proceed or not. Over time, inefficient allocation of OR time might even reduce an entire community's access to surgical care.

Of course, OR managers strive to avoid rescheduling and inefficient use of OR time. But when the schedule is created each day the traditional way – using paper, a white board, or a spreadsheet – it's just more time-consuming and stressful.



Robust perioperative scheduling software, on the other hand, stores both complex rules and scheduling history securely and accessibly. Managers using it can make critical

scheduling decisions more quickly and confidently. Plus, with the ability to more easily analyze past schedules, software helps managers set better rules and avoid repeat errors that lead to preventable schedule changes.

For example, with easy access to historical data, managers can spot patterns and make better staffing decisions in the future. Perhaps financial clearance problems frequently lead to cancellations, or surgical blocks are often released too late to be back-filled. When upstream issues like these can be quantified, they can also be addressed to improve OR utilization – benefitting all of the hospital's stakeholders.

## **Finding alignment, starting with finances**

Improving utilization of the OR is a goal for most hospitals. Experts generally agree 60-70% of most hospitals' revenue ties back to surgery<sup>1</sup>. Anything that improves – or degrades – utilization of the OR will, therefore, have a significant impact on hospital finances. Perioperative scheduling plays a significant role in hospital profitability by ensuring the OR is staffed and generating revenue. Effective scheduling also helps prevent avoidable staff overtime and its impact on profitability.

It's not the fault of managers in the OR that the scheduling process is so opaque. It's a limitation of their tools. When the schedule must be managed manually by just one or a few managers, and the only way to share it is via a document or white board, transparency is all-but-impossible.

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<sup>1</sup> [www.healthleadersmedia.com/physician-leaders/anesthesiology-focus-operating-room-efficiency](http://www.healthleadersmedia.com/physician-leaders/anesthesiology-focus-operating-room-efficiency)

Switching to OR scheduling software that can be accessed from anywhere allows everyone who relies on the schedule to learn about changes as they happen, using the devices they prefer. Software makes it faster and easier to process changes, too; combined with access on-the-go, that means a lot more notice of schedule changes. And with rules stored in a system accessible to everyone, a process that seemed secretive becomes transparent. That openness makes it easier for everyone to trust that team assignments and the distribution of call are handled fairly and methodically. Improving trust, in turn, strengthens critical staff relationships.

### Sharing access – and control

Managing the schedule in a system that is open and shared has other benefits besides building trust. Learning about changes to the schedule further in advance allows staff to feel more prepared and in control of their schedules. This can support morale – and help avoid burnout.

Burnout is a growing concern for healthcare providers. It's been widely reported that physicians experience a high rate of burnout and that the number of physicians burning out is growing. Burnout among nurses has long been tracked as a growing trend as well<sup>2</sup>. Burnout worries hospital CEOs, and not just because of the terrible impact it has on quality of life for physicians, nurses, and their families<sup>3</sup>. Physician and nursing shortages

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2 This study from Marshall University helpfully compiles and adds to research on nurse burnout: [http://mds.marshall.edu/cgi/viewcontent.cgi?article=1141&context=mgmt\\_faculty](http://mds.marshall.edu/cgi/viewcontent.cgi?article=1141&context=mgmt_faculty)

3 Numerous sources describing growing concern about physician burnout among healthcare leaders. This one from *Health Affairs* cites important research and views from prominent hospital CEOs: <https://www.healthaffairs.org/doi/10.1377/hblog20170328.059397/full/>

already hamper some hospitals' ability to provide all the services their communities need. Hospitals also hope to rely on senior professionals to provide leadership to the entire clinical team.



Software that gives staff more direct input to the schedule can help. The feeling that work life is outside of one's control is a contributor to burnout. On-call responsibilities can amplify this feeling, especially when the schedule is managed the old-fashioned, manual way – but automating the schedule can be a huge help.

For example, when employees agree to swap call, it seems reasonable that they should simply be able to work it out together. But if the entire schedule must be updated by a nurse manager by hand, even a simple swap becomes complicated – not just for the manager, but for everyone affected by the schedule. When manual on-call scheduling becomes too frustrating, employees may simply give up on getting the time off for family events or other occasions that can help them recharge.

Modern perioperative scheduling software solves this problem by enabling staff to swap call without involving the OR manager – significantly simplifying the process. Because the system stores and applies scheduling rules, control can be decentralized. Clinicians can work out changes on their own, with the software confirming the revisions fit the OR's staffing rules. And since the schedule is updated in real time, information is

available to anyone who needs it – reducing the risk of confusion about who’s on call.

## Help OR leaders lead

Reducing the red tape of manual perioperative scheduling doesn’t just help the staff. Nurse managers who handle scheduling for the OR typically spend hours each month on it. Unpredictable updates to the schedule frequently crowd out other important tasks. By speeding up and supporting their decision-making, OR scheduling software can help nurse managers reclaim valuable time.

With automated scheduling, managers still set the rules, but the system helps them keep track of them. By integrating with other key systems, such as EHRs and surgical software, scheduling software makes important data readily available – saving more time. Real-time information to manage locations, cases, and available staff in one centralized dashboard eliminates the need for the white board. Determining options and making revisions can be done faster, with less worry about accuracy. The updated schedule can also be shared electronically – ending the tedious legwork of contacting people individually. Everyone who needs to know the schedule can simply access it with their smartphone.



Using software to help do the job also gives everyone on the team confidence that scheduling rules are applied systematically, addressing another

serious concern for managers: fairness.

Even when managers strive for fairness in assigning, say, holiday hours or unplanned overtime, staff may doubt that the pain is equally shared. When the rules are tracked in paper files few people have access to, there’s always a risk that staff won’t trust the process. This is especially true if the OR is short-staffed and everyone is being asked to do more.

With shortages of key personnel like RNs and surgical techs affecting many hospitals, OR managers are sensitive to the effect of scheduling on morale – and so are their hospitals’ administrators. The most recent American College of Healthcare Executives’ annual survey found that personnel shortages were the third most pressing concern for hospital CEOs.<sup>4</sup> Only financial pressures and government mandates ranked higher. Along with so many other obvious benefits, automation can help correct the tiny erosions of morale that scheduling can inflict – over time, potentially making a significant contribution to staff retention.

## Better OR scheduling, stronger hospital

Moving from a white-board or document-based schedule to an automated perioperative scheduling solution can benefit an entire hospital, and even the community it serves, by:

- **Enabling faster, more accurate decision-making.** Experience and clinical knowledge count when setting scheduling rules. But once the constraints are set, computers can store critical

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<sup>4</sup> [www.ache.org/pubs/research/ceoissues.cfm](http://www.ache.org/pubs/research/ceoissues.cfm)

information better and calculate rescheduling options faster and more reliably.

- **Fostering trust.** Employee morale, burnout, and turnover are key concerns throughout healthcare organizations. Scheduling software can help by enabling scheduling rules to be more transparent and making it easier for staff to plan for time off. More advance notice of changes also allows the entire OR team to feel more in control of their workday.
- **Decentralizing the work.** The role of nurse managers in overseeing the schedule is critical. But centralizing every change, big or small, creates a bottleneck and needless extra steps. Allowing staff to handle their own call swaps – with software ensuring all constraints are met – makes them happier. And it saves time for other valuable tasks.

- **Accelerating communication.** Modern software creates schedules that can be accessed remotely via apps – using the smart devices we all carry in our pockets. This allows everyone to access the schedule from wherever they are, so that they can learn about changes before heading to the hospital. Everyone who needs to know will access the same information from the same system, minimizing the risk of miscommunication.
- **Improving OR utilization.** Many hospitals seek better OR utilization as a means to improve profitability. Even small improvements in utilization can allow the OR to deliver more profits for the hospital – and more access for the community. But making it happen takes more than just will and effort; it requires the ability to optimize the schedule. Automation does just that, while minimizing the risk of human error.



## **ABOUT KRONOS**

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