Performing more cases with the same OR capacity and personnel—and having more satisfied surgeons, anesthesia providers, and staff. That may sound like utopia, but there is a way to make it happen. The answer is a well-run block scheduling program. The need to manage OR time effectively is increasingly important as hospitals brace for lower reimbursement as part of health care reform. Hospital leaders will be looking to surgery as one way to maximize revenue while reducing costs.

If your block scheduling program could use a tune-up, this issue offers a set of guidelines developed by a veteran perioperative medical director that he says can help improve OR utilization, generate more revenue, and increase satisfaction.

William Mazzei, MD, has worked with hospitals on OR-related issues for nearly 25 years. He is clinical professor of anesthesiology and was medical director of perioperative services at the University of California, San Diego, for 20 years. He is also a founder of the American Association of Clinical Directors (originally the Association of Anesthesia Clinical Directors) and one author of the procedural times glossary.

(See the related article on p 9 for the research perspective on managing block allocations, which includes examining the financial implications of block time decisions.)

**Guiding principles**

Effective block scheduling, Dr Mazzei says, rests on a few principles. The program:

- is guided by policies that are transparent, developed by consensus, and perceived as fair
- is actively managed by a collaborative team of leaders from surgery, nursing, anesthesia, and the hospital administration
- allows surgeons access to the OR schedule while achieving high utilization.

“Management of blocks must be done collaboratively,” Dr Mazzei says. “It must consider everyone’s perspective so problems can be acknowledged and discussed.”

**Guidelines for blocks**

The guidelines he advocates govern who has block time, the balance between block and open time, and the rules for scheduling.

**Who can have a block?**

Blocks can be assigned to individual surgeons, groups, or services. “It doesn’t matter as long as the people assigned the block understand that they are responsible for filling it,” Dr Mazzei says.
Insist on 8-hour blocks

In general, blocks should be 8 hours long or an entire shift. “This is perhaps the most important guideline for efficiency and satisfaction,” he says.

Benefits of 8-hour blocks include:

• minimizing gaps during the day and use of overtime
• increasing surgical volume because surgeons know they need to maintain utilization to keep their block time.
• allowing the use of specialty teams.

The 8-hour blocks make good use of surgeons’ times, Dr Mazzei says, though they may need to be convinced of that initially.

“If a surgeon tends to operate for 8 hours every Monday, then having a block is the most efficient use of his or her time,” he contends. “It also allows facilities to plan and have the right staff available.”

Apply the 80-20 rule

In block scheduling, the 80-20 rule means:

• Up to 80% of available rooms can be blocked in a system that is working well.
• The remaining 20% of rooms are not blocked and are designated as open or urgent/emergent rooms. For centers with fewer than 10 ORs, it is generally better that at least 2 ORs remain as open rooms.

Having open rooms ensures that surgeons who don’t have block time or who have little block time can get on the schedule in a reasonable time.

Vary release times by specialty

Release times for blocks, also called expiration times, are another way to provide open time and serve as an incentive for surgeons to use their blocks. Typically, release times are geared to how far in advance each specialty schedules its elective cases (chart). Alternatively, some facilities use a standard 5-day release time.

This rule has several corollaries:

Corollary 1

Surgeons may release blocks for open use only with a 30-day notice. This

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**Suggested release time guidelines**

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<th>Specialty</th>
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<td>Plastic (cosmetic)</td>
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<tr>
<td>Orthopedics</td>
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<td>Ophthalmology</td>
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</table>

*Days refer to calendar dates.

No release time if block utilization consistently exceeds 85%.

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*Specialty Cardiac

General surgery

Gynecology

Head and neck

Neurosurgery

Neurosurgery (spine)

Orthopedics

Orthopedics (spine)

Gynecology

Plastic (cosmetic)

Vascular surgery

Urology

Ophthalmology

Suggested release time guidelines

No release time if block utilization consistently exceeds 85%.

*Days refer to calendar dates.
is far enough in advance to allow others to access the block and prevents surgeons from releasing unused time at the last minute to avoid having it count against their utilization.

**Corollary 2**

Surgeons cannot schedule outside their block on days they have a block. “That prevents them from using the open room first and then switching those cases to the block at the last minute if their block isn’t filled,” he says.

**Corollary 3**

Surgeons cannot release a portion of their block. For example, if an 8-hour block has only 6 hours of cases, the surgeon can’t simply release the remaining 2 hours. “Release at the last minute doesn’t allow anyone else access to that time,” he explains. “It games the system because it allows someone to adapt their block to their utilization after the fact.”

**Corollary 4**

Any cases a surgeon performs on his or her block day count toward the surgeon’s utilization statistics, even if the case is scheduled in the block after the time has been released.

**Corollary 5**

Don’t artificially constrict a surgeon’s block. For instance, a surgeon with
an 8-hour block has 6 hours of cases and wants to book a $2\frac{1}{2}$ hour case. Or a surgeon wants to work for 10 hours every Tuesday.

“By allowing that, you greatly reduce dissatisfaction,” he says. “You also greatly reduce ‘creative scheduling’ where someone tells you a case is going to take 1 hour when you know it is really going to take 3 hours.

“It’s better to say to a surgeon that on any day you have a block, you can book it for as long as you want. That is a major surgeon satisfier. This is something they see as positive at the same time you are reducing other means of access.”

Managing block utilization

- Adjusted utilization is calculated monthly as a rolling average and reviewed quarterly.
- Thresholds for maintaining block time:
  - 75% to maintain total block time
  - 60%-74% to retain 3/4 total block time per month
  - 50%-59% to retain 1/2 total block time per month
  - <50% lose block.
- Surgeons receive a letter monthly reporting on their utilization. This includes surgeons whose utilization meets the threshold to provide positive feedback.
- Surgeons whose utilization is below the threshold receive a warning letter after one quarter.
- If utilization is below the threshold for 2 consecutive quarters, the surgeon’s block time is adjusted. That is, changes are made only after a 6 months' rolling average.
- Block time is adjusted only by 8-hour increments. For example, a surgeon with an 8-hour block every Monday whose block needs adjustment would have 1 of the 4 weekly blocks removed per month.

Making the case for 8-hour blocks

Moving to 8-hour blocks may be a tough sell initially with surgeons. But once they make the change, “they are much happier,” Dr Mazzei says, adding that with health care reform, hospitals will find shorter blocks financially unsustainable because too much time is unused.

Surgeons who have shorter blocks typically like to operate in the morning, go to their office in the afternoon, and come back to operate late in the day. In contrast, with an 8-hour block, a surgeon can plan to spend the whole day in the OR and schedule office visits for other days.

“Surgeons who have converted to an 8-hour block will tell you that on the day they are in the OR, their day is less stressful because they don’t have to worry about being in the office. They get more done, and they tend to finish earlier because their day is more efficient,” he says. “Similarly, the days they are in the office go better because they are not worried about going to the OR. They see more patients and get more done.”
How do you make the case? Dr Mazzei suggests having a surgeon who already has switched to 8-hour blocks talk to the others. This may mean scheduling a call or visit with a surgeon from outside the facility.

**Open rooms**

A few rules govern use of the open rooms available each day.

- Open rooms are first-come, first-served. The only exception is that a surgeon cannot use them on a day he or she already has block time.
- Open rooms are available until 12 noon on the day before surgery. Then they are assigned at the discretion of the OR medical and nursing directors to streamline the schedule.
- Except for the first case, other starts in open rooms may be delayed by up to 2 hours to accommodate earlier-starting cases.

This rule helps to address the problem of surgeons who don’t want to operate before 9 am or so, leaving the 7:30 am time open. The solution is a bumping policy that allows an early surgeon to bump someone who is later. For example, a surgeon has a 9 am case in the open room, and another surgeon wants to book a 2-hour case. That case can go at 7:30 am with the following caveats:

- The case can’t be booked less than 2 days in advance, allowing the later surgeon who is bumped enough time to rearrange his or her schedule.
- The later surgeon must be given the “first right of refusal.” That is, the later surgeon must be asked if he or she can move up his or her case to 7:30 am. If the surgeon cannot, the schedulers may delay the later surgeon’s start time by up to 2 hours.

**Managing block time**

Once you introduce these rules, how do you monitor them and make sure the system runs smoothly? That requires active management by a collaborative team, Dr Mazzei says.

**Governance structure**

He advocates a surgical services executive committee, similar to a board of directors for the OR. The committee is composed primarily of surgeons and includes leaders from nursing, anesthesia, and the hospital administration. One charge of the committee is to implement, monitor, and manage the block scheduling system.

It’s best if a hospital administrator, ideally the CEO, is present at each meeting.

“When the CEO attends regularly, you can make the most progress because people actually believe something will happen,” he says.

“It also helps ensure someone can’t go around the committee and talk to the CEO because the CEO is there.” (For more on OR governance, see the June 2010 OR Manager.)

**Monitoring block utilization**

Blocks are monitored monthly, with regular feedback to surgeons, using adjusted utilization, which includes turnover time. For example, a surgeon with an 8-hour block who starts at 7:30 am and finishes at 12:30 pm would have 5 hours of utilization, or 62.5%.

At least 75% utilization is expected for a surgeon to retain all the block time. Why 75%?

He explains: If a surgeon has an 8-hour block but uses 5½ hours, the util-
Utilization is 68.5%, leaving 2½ hours a day unused. Requiring 75% utilization encourages the surgeon to schedule an extra case to keep block time.

“Invariably, when we implement this guideline, we find many services will schedule an additional case out of the worry they will lose their block,” he says.

**More cases, happier personnel**

ORs that implement and actively manage a block scheduling system using these guidelines see surgeon satisfaction increase, he says, because even though rules restrict use of blocks, open time increases, and surgeons can run cases past the end of their blocks.

“Surgeons think access to the OR has improved, and thus, their satisfaction has improved.”

The hospital benefits because surgeons increase their volume to retain their blocks, bringing in more revenue. Nurse managers and staff are happier because the schedule is more predictable, teams can be assigned to work with surgeons who have all-day blocks, and more cases are completed during prime day-time hours.

*Dr Mazzei credits the research of Franklin Dexter, MD, PhD, for informing his work on block scheduling.*

**Reference**