Frequently Asked Questions

About Concurrent/Overlapping Surgery

What is concurrent surgery?

Concurrent surgery—also called overlapping surgery—is an important method of managing busy operating rooms. Widely used at academic medical centers as well as at many community hospitals, overlapping surgery involves the coordination of various procedures for a single surgeon or teams of surgeons throughout the day so that the preparation and procedure for one patient begins in one operating room as the care of a second patient concludes in another operating room. The federal Centers for Medicare and Medicaid Services has established policies for what it considers acceptable and appropriate overlapping practice, and providers must follow these rules to be reimbursed for the surgery.

Why does the hospital do overlapping surgery?

Overlapping surgery is used for a number of reasons, including:

- **Trauma** – Overlapping is essential in emergency situations when multiple trauma patients require the expertise of surgical sub-specialists, such as in the 2013 Boston Marathon bombings, when many victims were brought to hospitals in need of immediate surgery to save lives and limbs. Overlapping enables expert surgical teams to provide the highest level of care to a large number of critically injured patients.

- **Optimal use of rooms and surgical teams** – The operating rooms are one of the most costly and in-demand resources in the hospital, and managing the space effectively enables the teams to care for patients in a more timely manner. One method for achieving efficiency is the staggering, or overlapping, of cases among different operating rooms, which reduces the time surgical teams must wait between cases.

- **Access** – Overlapping offers greater and more timely access to certain high-volume surgical specialties as well as to expert senior surgeons who are often widely sought.

- **Timeliness and availability of vital services** – Overlapping enables surgical teams to perform more of certain kinds of procedures during the daytime hours when important areas such as clinical laboratories are fully staffed and readily available.

- **Education** – Overlapping expands opportunities for fellows and residents to participate in and eventually perform a broader range of procedures under a system of graduated responsibility. At the discretion of the attending surgeon, the fellows and residents perform a broader range of procedures and incrementally expand their abilities, experience and proficiency and gain increased independence.

Does overlapping surgery cause patient harm?

The data from the MGH and from studies at hospitals elsewhere show no difference in outcome or complication rate between overlapping and non-overlapping surgery. Specifically:
The MGH’s Codman Center for Clinical Effectiveness in Surgery analyzed data related to complications in cases that overlapped as well as in comparable cases that had no overlap and found no difference in outcomes.

Expert clinical reviews in the Lawrence Center for Quality and Safety evaluated 25 overlapping cases from 2014 that had complications, and their analysis determined that none of the complications was a consequence of overlapping.

Studies in national peer-review journals have not identified any correlation between overlapping and complications.

Recent reviews by the MGH perioperative staff and experienced quality staff – prompted in part by questions from the Globe about specific cases – also showed no increase in complications related to overlapping surgery.

Earlier this year, the Massachusetts Department of Public Health came to MGH unannounced to investigate a complaint about the practice of overlapping surgery. The DPH reviewed specific medical records, looked at outcomes, interviewed a number of staff, reviewed policies and consent forms. The MGH received a report from the DPH several weeks later saying that all allegations were found to be invalid.

**If the DPH found that all the allegations were invalid, why didn’t this end the matter?**

We had hoped that the DPH report would demonstrate to the Spotlight team that the hospital was operating in an appropriate way and providing high-quality, safe care under the guidelines set forth by a strong, well-defined policy. It is unclear why the Globe would not accept this DPH report as an indication that the information leaked to reporters about the practice of overlapping surgery at the MGH was inaccurate.

**How much overlapping surgery does the MGH do every year?**

Overlapping surgery comprises a small percentage of the total surgical activity at the MGH. In 2014, of the 37,000 surgical procedures at the hospital, 15 percent had some case overlap, with most involving the prep time required for draping, positioning and anesthetizing the patient before the incision is made, or the time after the closure. In less than 3 percent of total surgical cases was there any overlap involving the actual surgical procedures.

**Does the MGH do more concurrent surgery than other hospitals in Boston?**

The MGH has provided the Globe with a great deal of data regarding overlapping surgery. We understand that the Globe was unable to get comparable data from any other hospital locally or nationally, so it is difficult to say with certainty how MGH’s percentage of overlapping surgery compares with others. Anecdotally, however, surgeons familiar with surgical processes at other hospitals around the country have said that the practice is more common in many other outstanding hospitals. Additionally, some MGH surgeons also operate at other hospitals in the Boston area, and they report that the practices at MGH are consistent with those hospitals.

**Is overlapping surgery the same as a surgeon running two rooms?**

No. Running two rooms is when certain senior surgeons have pre-scheduled time in two rooms simultaneously and can schedule their appropriate cases in a staggered and coordinated fashion.
Overlapping often occurs when a surgeon runs two rooms. But overlapping also happens through coordinated OR management, when, for example, an operating room is available, and a patient scheduled for surgery with a physician who is finishing up a case in the first room is moved into the open OR so the preparation can begin and the case in the second room can be started sooner than if the patient and surgical team had to wait for the first room to be cleaned.

**Are all surgeons at the MGH allowed to run two rooms?**

No. Only a small number of experienced surgeons run two rooms. They coordinate with the remainder of the surgical team to stagger cases in a safe way. Factors involved in running two rooms include the specific surgical team, the complexity of the procedures, the health of the patients and the availability of operating rooms. Certain procedures that have a longer prep time are often considered appropriate for overlapping, as the surgeon can be in the first room finishing a case, while a patient in the second room is being prepped and anesthetized. In all cases, the attending surgeon must be present for the critical parts of the procedure.

**Can surgeons at the MGH run three or more rooms?**

No. MGH’s policy prohibits a surgeon from running more than two rooms, except in emergency situations, such as the Boston Marathon bombings, when the resources of many ORs and many surgeons are needed urgently.

**Can any surgeon who wants run two rooms?**

No. The ability to run two rooms is determined by the chief of the department or division in conjunction with perioperative leadership based on the surgeon’s experience, the makeup of surgical teams, the type of surgeries involved and the availability of OR resources.

**Who is in charge of the case in one room when the surgeon is in an operation in another room?**

The attending surgeon is responsible for the care of the patient whether that surgeon is doing or overseeing the procedure, or whether a trainee is making the incision while the attending surgeon is finishing up a procedure in another room. In the very rare event in which an attending surgeon is in the critical part of the surgery in one room and is needed unexpectedly in the other room, the hospital policy calls for another qualified attending surgeon to be immediately available to help out.

**Does the hospital make more money by doing overlapping surgery?**

Overlapping surgery is not more financially beneficial for the hospital. There is no associated extra revenue and it does not increase the number of surgeries done each day but rather helps manage volume safely and effectively. It enables a higher percentage of operations to be scheduled in the daytime when services such as the lab are fully available. These cases would likely occur anyway, even if they were scheduled sequentially, but many would be pushed into the evening hours, when certain important services may not be as readily available. Overlapping surgery can reduce the expense of running the operating room by enabling more efficient resource utilization.
Do the individual surgeons make more money by doing overlapping surgery?

Overlapping surgery allows for better coordination of the highly demanded OR resources. A surgeon would likely do the same number of cases, but overlapping certain kinds of cases enables greater effectiveness and more timely access to care. If no overlapping were to occur, more elective procedures would be scheduled later into the evening, inconveniencing patients and families, or causing patients to have to wait longer before getting proper care.

Is overlapping surgery controversial and the focus of great debate at the MGH and nationally?

While the Globe has told us repeatedly that its story is centered on the major contentious debate about overlapping surgery at the MGH, this seems to be an overstatement. Only one surgeon – the Globe’s primary source – and a few anesthesiologists have brought up overlapping surgery as a safety concern to senior leadership. These concerns have been taken quite seriously, and the hospital hired an independent reviewer to thoroughly investigate them. The findings of this review reassured hospital leadership about the safety and appropriateness of the practice. Each year as the hospital sets quality and safety goals, it looks for opportunities to make care better and safer. Overlapping surgery has never been identified as an area that is concerning or causing undue risk to patients. We are not specifically aware that the practice is highly controversial or the subject of great debate either at the MGH or in other hospitals.

What is the Stern Report?

In 2011 when Dr. Dennis Burke approached leadership about concerns related to overlapping surgery, billing concerns and tension among staff in Orthopaedic Surgery, the hospital engaged former US Attorney Donald Stern to conduct a comprehensive and independent review of the allegations. He did so, and provided the hospital with his report. The hospital is confident that it has thoroughly addressed the concerns raised.

Why wouldn’t the hospital give the Stern Report to the Globe or to others who have asked for it?

To ensure that those who were interviewed by the Stern team would feel comfortable sharing whatever information they wanted, the report was conducted under attorney-client privilege. As such, it is confidential and may not be shared publicly.

Has the MGH’s overlapping surgery policy changed much over the years?

Yes. For more than a decade, the MGH, like most hospitals across the country, practiced overlapping surgery according to the standards set forth by the Centers for Medicare and Medicaid Services (CMS), which were focused on documenting certain aspects of a surgery – such as requiring the attending surgeon to be present for all critical parts of the surgery – primarily for billing purposes. In 2010, the leadership of Perioperative Services at MGH – who are charged with the management of MGH’s operating rooms and ensuring safety and quality – began to review a range of surgical protocols, including the hospital’s policy on overlapping surgery. As part of this effort, OR and surgical leadership determined that the policy should be updated and strengthened to provide greater definition, offer more guidance to surgeons, ensure that best practices were being used and promote consistency of implementation. The policy was updated with input from the leaders of all the surgical services at MGH.
It was formally adopted in October 2012 and continues to guide the way overlapping surgery is practiced at the hospital today.

**How is the updated policy from 2012 different from the previous policy?**

The updated policy clearly defined the practice of concurrent surgery, the team and its oversight by the attending. It also gave clear direction for expected communication between the surgeon and the rest of the OR team about the attending surgeon’s availability and the availability of a back-up attending when needed. In addition, it provided direction about communication with the patient regarding the attending surgeon’s role in the care as well as the role of the team. As part of this effort to strengthen the hospital’s overlapping surgery policy, each MGH surgical service reviewed its procedures to identify types of surgery that for various reasons should not be performed in an overlapping manner. In addition, each surgical service was asked to define to the extent possible what the critical parts would likely be for various procedures.

**Why does the MGH say that its overlapping surgery policy is among the strongest in the nation?**

Most hospitals in the country use the billing guidelines established by CMS as the framework for their overlapping surgery policies. The MGH used to rely on these CMS guidelines, but in October 2012, the hospital adopted an updated policy that went much further in defining how overlapping surgery would be practiced based on the highest standards of quality and patient safety. In response to the Globe’s investigation, we submitted our policies related to overlapping surgery and training of surgical residents along with our surgical consent form to the American College of Surgeons requesting an assessment of our policy compared with those of other national academic medical centers. The American College of Surgeons provided us with a letter saying that our policies were a best practice and exceeded national standards.

**About Overlapping Surgery in the Orthopaedic Service**

**Is overlapping surgery used more in orthopaedic surgery than in other surgical specialties?**

Orthopaedic surgery tends to have more overlapping than some other surgical specialties. The preparation – draping, positioning, inserting lines, anesthetizing, etc. – required for certain orthopedic cases often involves significant prep time. Also, elective orthopaedic surgery typically has a more consistent and predictable timeline. In addition, some orthopaedic cases may involve multiple specialists. For example, general or thoracic surgeons may gain access to the surgical field in the abdomen or chest before orthopaedic surgeons begin their part of the procedure, or a trauma patient with multiple injuries may require other surgical specialists to treat the patient before orthopaedic issues are addressed.

**Are most operations in Orthopaedic Surgery at the MGH done in an overlapping manner?**

No. The rate of case overlap of any kind in orthopaedic surgery at the MGH was 24 percent in 2014. The rate of procedural overlap was 9 percent.

**Do all orthopaedic surgeons at the MGH run two rooms and do overlapping surgery?**
Currently six of the 72 orthopaedic surgeons at the MGH can run two rooms on certain days. This overlapping includes both the case overlap, in which a patient is being prepped for surgery in the second room while the surgeon finishes a case in the first room, as well as the procedural overlap, which usually involves the resident or fellow making the incision or closing the incision while the attending surgeon is caring for a patient in another operating room. Many surgeons who do not explicitly run two rooms may be involved in cases that overlap because an operating room opens up, making it possible to overlap the very beginning and very end of a case to streamline OR function.

Why does the Orthopaedic Trauma Team schedule cases differently from the rest of the department?

The Orthopaedic Trauma Team functions as a team, and as such, uses a team-based approach to care. Given the patients that the service takes care of and the dynamic, somewhat unpredictable nature of the work, the Orthopaedic Trauma Team must be flexible to constantly manage urgent, emergency and follow-up cases. The team approach enables the service to use two operating rooms to ensure that patients receive timely, high-quality care and that the schedule is flexible so decisions can be made in the moment to meet the most pressing and critical needs of patients. It is also worth noting that the Orthopaedic Trauma Team is unusual in that the surgeons often don’t have a pre-existing relationship with the patient, as other surgeons usually do. The team treats patients who usually come into the hospital through the Emergency Department, where the process of triaging patients awaiting surgery is constantly being adjusted based on urgency.

About Consent and Patient Awareness

Are patients told before their surgery if their surgeon is going to be running two rooms or doing overlapping surgery?

The MGH’s consent form for surgical procedures makes it clear that patients in a teaching hospital are cared for by a team that includes attending surgeons, anesthesiologists, nurses, residents, fellows, surgical techs and others and that the attending surgeon is present for the critical portions of the surgery. The MGH overlapping surgery policy requires that the attending surgeon discuss his or her involvement in the procedure with the patient and family.

Can patients demand to know if their surgery is going to be overlapping?

Patients are encouraged to ask any questions they have about their surgery. Patients should fully understand and be comfortable with the procedure and know who is on the surgical team and what role they have. All these questions should be addressed during the conversation between patient and surgeon before surgery, during the consenting process. Overlapping, however, may be unplanned, occurring in cases when an operating room becomes available, and rather than waiting for the first procedure to end and that OR to be cleaned, the next patient can be moved into the open room so that procedure can start sooner to streamline OR function.

Can patients demand that their surgeon be in the room the whole time?
The team-based approach to care is the hallmark of what we do in the OR. Patients should be comfortable with the way their surgery is planned. If a patient feels very strongly about any aspect of the surgery – including any overlap – then these issues should be addressed fully before the surgery takes place.

**Is it safe for trainees to do parts of the operation – like the incision or the closure – alone, without the direct supervision of a senior surgeon?**

The training of surgeons is an incremental process. Specialty surgical training can extend for many years, often more than five years after completing medical school. A first-year trainee is very different from a senior surgical resident, and similarly, a resident is different from a fellow, who is a fully trained and often board-certified surgeon gaining additional expertise in a particular subspecialty. A critically important part of surgical training is gaining skills, first by observing, then by assisting, then by doing and finally by doing independently. The senior surgical educators who are overseeing the training of residents and fellows are in the best position to determine what parts of a procedure a resident or fellow can safely perform and how much independence any particular resident or fellow can have given many variables. In fact, a conclusion from a 2013 symposium sponsored by CRICO – the patient safety and medical malpractice company that serves the Harvard Medical School community – was that the greatest crisis in surgical training related to graduates who were not appropriately prepared to independently perform procedures because of inadequate experience, not because of lack of supervision.

**About Dr. Dennis Burke and Other Globe Sources**

**Is Dennis Burke still working at the MGH?**

No. Dennis Burke no longer has privileges or an appointment at the MGH.

**Was Dennis Burke fired because he raised concerns about overlapping surgery?**

No. Dr. Burke has been raising these concerns for five years and has remained a staff member in good standing throughout this time. Dr. Burke’s staff appointment and privileges at the MGH were recently terminated for substantial, unprecedented breaches of confidentiality he chose to commit with regard to hospital medical records and peer-review conferences, which are confidential forums and serve as a cornerstone of quality assurance and safety efforts.

**According to the Spotlight story, in addition to Dennis Burke anesthesiologists also have been critical of the practice. Are many anesthesiologists at the MGH against overlapping surgery?**

One interesting aspect that the story fails to highlight is that the anesthesiologists mentioned as sources in the Spotlight story – like anesthesiologists across the country – routinely run at least two rooms, as they oversee the work of residents and fellows and others involved in the care of patients. The three or four anesthesiologists included in the story, most of whom are no longer at the MGH, shared with the Globe many emails that they had collected for the past decade outlining issues and concerns they had, mostly about specific surgeons. Unfortunately, the emails portray only one side of a situation. While some of these incidents represent legitimate issues that have been reviewed and addressed, many of
the emails contain inaccurate, incomplete or exaggerated accounts. Because of patient privacy and in some cases because of the peer-review protection of some of the quality assurance forums, the hospital is prohibited from publically addressing the allegations fully. We have told the Globe what we could, but all of these issues raised were reviewed and addressed as appropriate.