What is Concurrent/Overlapping Surgery?

Concurrent surgery – also called overlapping surgery – is an important method of managing busy operating rooms. Widely used at academic medical centers and community hospitals, overlapping surgery involves the coordination of various procedures for a single surgeon or teams of surgeons throughout the day so that preparation and procedure for one patient begins in one room as the care of another patient finishes in another room.

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

- **Trauma** – Overlapping is essential in emergency situations, such as when multiple trauma patients require that services of surgical sub-specialists. This was the scenario during the 2013 Boston Marathon bombings, when many victims were brought to the hospital and required immediate surgery to save lives and limbs.
- **Optimal use of rooms and surgical teams** – the operating rooms are one of the most in-demand resources in hospitals, and managing the space effectively allows 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 surgical specialties, many of them high-demand, high-volume elective procedures.
- **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 pathology, laboratories and radiology 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. 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.

At the MGH, overlapping surgery comprises a small percentage of the total surgical activity. In 2014, of the 37,000 surgical procedures at the MGH, 15 percent had some case overlap, with most of the overlap occurring during the time before the incision or after closure. Only 3 percent of cases involved any overlap when the actual procedure is under way. The critical parts of two cases cannot overlap. Data from the MGH as well as national studies have demonstrated no difference in complication rates for overlapping and non-overlapping cases.

The current overlapping surgery policy that guides the practice at the MGH – which was updated and approved in 2012 – is considered one of the strongest such policies in the country. The American College of Surgeons has called the MGH policy an example of best practice and said that it exceeds national standards.