

HOW DOES IT HAPPEN?

1 MARKING THE WRONG PLACE.

One of the most common factors that cause a wrong-site surgery comes from incorrect pre-operative surgical markings – or the lack of a mark at all. A surgeon may mark the wrong site or mark only the patient's right or left hand to indicate the side of the procedure. In the OR these marks are often hidden by surgical drapes. When this happens, the surgical team is forced to identify the operative site based solely on memory.

2 LEFT OR RIGHT?

Many people are prone to confusing left with right. A 2020 study found that 14.9% of people had difficulty distinguishing left from right. Additionally, OR personnel can be confused when patients are turned around. "To operate on the back of someone's leg, the surgeon may turn the patient from supine to prone, and so left becomes right."¹



3 MARKING VARIABILITY.

A lack of standardized marks plays a large role in wrong-site surgical errors. Currently, surgeons use a wide range of marks, and in busy operating rooms the teams have to remember how and where each surgeon typically marks their patients.

¹Page, L. (2021). MDs Doing Wrong-Site Surgery: Why Is It Still Happening? <https://www.medscape.com/viewarticle/959938>. Other studies have shown higher rates.

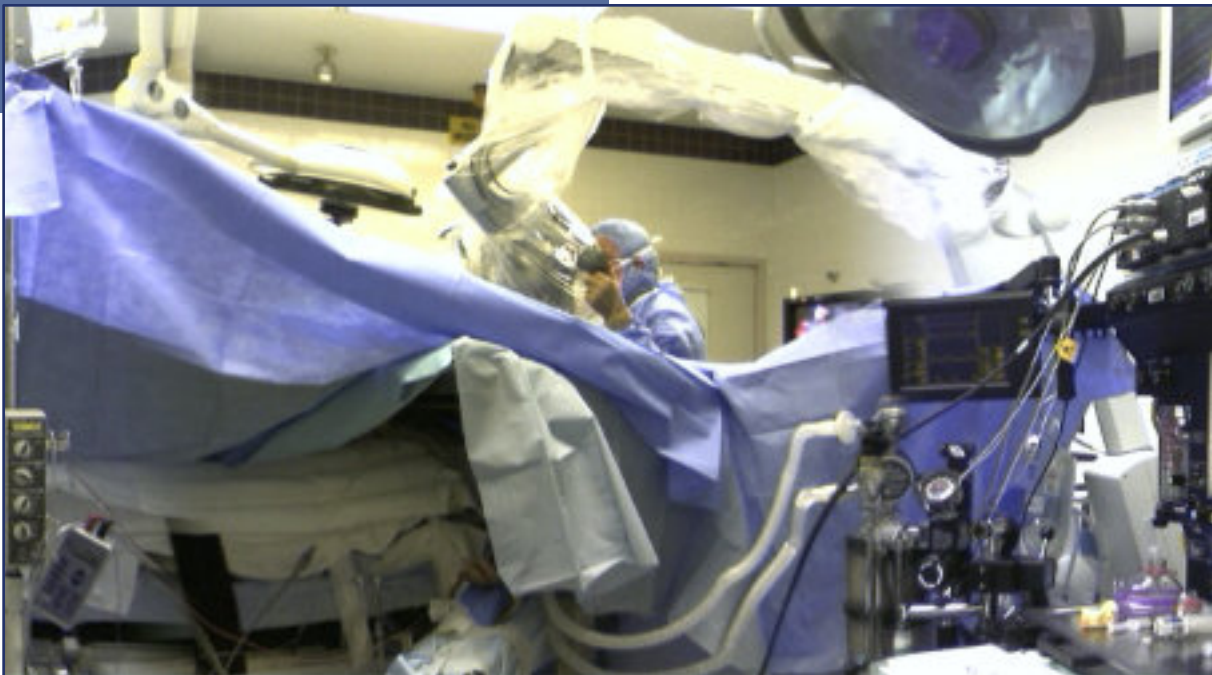
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4 FATIGUE.

OR staff are constantly required to adapt to fast-paced, evolving situations. They must adjust to different patients, rooms, instrumentation, and surgeons. Add to this fatigue, staff breaks, shift changes, a lack of familiarity with surgeons' varied markings, and *mistakes will be made.*

5 SPECIALIZED ROOMS.

As surgeries have become more specialized, the instrumentation, X-ray imaging, patient positioning, and even the operating rooms themselves have become specialized and tailored for specific types of surgeries. Many rooms have become uniquely "sided," which can lead to inadvertent wrong-sided surgical errors.



6 PRODUCTION PRESSURES.

Operating rooms are challenged every day to maximize efficiency. Turnovers and surgeries can take longer than expected. Cases are sometimes cancelled and emergency cases are "bumped" ahead of scheduled ones. Often safety is sacrificed for speed, which means cutting corners. Sometimes steps for confirming the correct operative site are skipped altogether.