Table B.56: Patient Identification Errors in the Operating Room–Systematic Reviews

Note: Full references are located in the [Section 11.1 reference list](#Section11point1refs).

| **Author, Year** | **Description  of Patient Safety Practice** | **Setting** | **Summary of  Systematic Review** | **Implementation  Themes** | **Notes** |
| --- | --- | --- | --- | --- | --- |
| **Devine et al., 20101** | Joint Commission Checklist Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery | Operating room | The estimated rate of wrong-site surgery varies, ranging from 0.09 to 4.5 per 10,000 surgeries performed. Many studies do not allow for the calculation of an event rate.  Contributing factors to wrong-site surgery include incorrect patient positioning or preparation of operative site, patient or family providing incorrect information, incorrect or lack of patient consent, failure to use site-markings, surgeon fatigue, multiple surgeons, multiple procedures on same patient, unusual time pressures, emergent operations, unusual patient anatomy, and overall poor communication.  No evidence exists to support the Joint Commission checklist, North American Spine Society checklist, or other preventive measures and their effectiveness in preventing a wrong-site surgery. | North American Spine Society and Joint Commission checklists are insufficient on their own to minimize wrong-site surgery. | Strength of evidence for the questions is very low (incidence/frequency of wrong-site surgery and what preoperative measures are effective in preventing wrong-site surgery) and low (what are the causes of wrong-site surgery?). |
| **Hempel et al., 20153** | Joint Commission Universal Protocol | Operating room | Review examined the incidence, root cause of. and interventions to prevent wrong-site surgery, surgical fires, and retained objects since the implementation of the Universal Protocol. Authors reviewed 138 studies. and the most common cause for wrong-site surgery was miscommunication. Five studies examined the effect of the Universal Protocol intervention and, although there was a downward trend in wrong-site surgery, it was statistically insignificant. | Review identified 25 studies that evaluated operationalizing components of and alternatives to the Universal Protocol, but none of the studies reported a statistically significant effect on wrong-site surgery. | None |
| **Kim et al., 20159** | Surgery safety practices | Operating room | Healthcare workers should use the following to reduce wrong-site surgeries: (1) When scheduling the procedure, schedulers should verify patient documentation and receive all surgery requests in writing. (2) During the preoperative visit, patient should provide informed consent, and should be involved in marking the procedure site. (3) Before the procedure, a safety checklist such as the World Health Organization (WHO) checklist should be fully implemented. (4) A discharge plan should be discussed before leaving the facility. | According to the author, patient safety guidelines in surgery are too general and need more standardization. | None |
| **Ragusa et al., 20162** | Joint Commission Universal Protocol and WHO Safe Surgery Checklist | Orthopedic surgeons/ operating rooms | Surgical checklist compliance varies, and additional measures like audits or monitoring were necessary to maintain compliance. No reviewed study reported a 100% compliance rate.  Literature shows that the use of the WHO surgical safety checklist in the operating room improves patient safety in the operating room by decreasing postoperative complications and mortality. This approach is also shown to improve processes such as the timely use of prophylactic antibiotics; and after the implementation of checklists, which help to improve team communication and decrease communication failures.  Reporting of wrong-site surgery is voluntary and those that are reported represent only a portion of those that occur, so it is difficult to draw conclusions about the frequency of occurrence.  Wrong-site surgeries are rare, and showing any statistically significant reduction in occurrences with the implementation of checklists would require a very large study. | Five implementation barriers: (1) unfamiliarity with checklist, (2) hierarchal style in operating room, (3) problems with timing of the time-out portion, (4) duplication or repetition of items on checklist, (5) inclusion of items on the checklist that were not relevant.  Literature also showed that some key team members limited the successful implementation of checklists. Literature shows that some surgeons were not supportive, while anesthesiologists and nurses tended to be more supportive. | None |