The Joint Commission | Joint Commission International | World Health Organization

WHO Collaborating Centre for Patient Safety Solutions

Aide Memoire

Performance of Correct Procedure at Correct Body Site



Patient Safety Solutions
| volume 1, solution 4 | May 2007

► STATEMENT OF PROBLEM AND IMPACT:

Wrong site procedures—including wrong side, wrong organ, wrong site, wrong implant, and wrong person—are an infrequent, though not "rare" event as evidenced by a steady increase in the number of reported cases. For example, in the United States of America 88 cases were reported to the Joint Commission in 2005, and several other reporting bodies have noted numerous cases annually as well.

Considered preventable occurrences, these cases are largely the result of miscommunication and unavailable or incorrect information. Detailed analyses of these cases indicate that a major contributing factor to error is the lack of a standardized pre-operative process and likely a degree of staff automaticity (checking without thinking) in the approaches to the preoperative check routines.

In the 1980s, the American Academy of Orthopaedics and the Canadian Orthopaedic Association identified wrong site surgery as a problem and introduced programmes for marking the surgical site as a preventive measure. Since the Joint Commission began reviewing sentinel events and their root cause analyses in the United States more than a decade ago, wrong site surgery has now become the most frequently reported category of sentinel events. Two Sentinel Event Alert newsletters have been published on this topic—one in 1998 and another in 2001 (1,2). In 2003 the Joint Commission's National Patient Safety Goals addressed this topic with three specific requirements (3). However, in light of continuing reports of wrong site, wrong procedure, and wrong person surgery (4,5), the Joint Commission has hosted a Wrong Site Surgery Summit, in collaboration with more than 30 other professional groups in the United States of America. The Joint Commission further pursued broad consensus on the validity and preventability of the problem, the fundamental principles through which prevention might be achieved, and specific recommendations, which together now form a "Universal Protocol" for preventing wrong site surgery—this includes all procedures performed in all types of procedure areas.

More than 50 professional associations and organizations have since endorsed this Universal Protocol. A public comment period generated more than 3 000 responses from surgeons, nurses, and other health-care professionals, overwhelmingly supporting the Universal Protocol. To further emphasize the importance of prevention, the Association of Perioperative Registered Nurses sponsored a National Time Out Day. In the United Kingdom of Great Britain and Northern Ireland, the National Patient Safety Agency (NPSA) and Royal College of Surgeons produced a similar patient safety alert on correct site surgery, which was endorsed by 6 health-care practitioner organizations and one health-care forum (6).

► ASSOCIATED ISSUES:

Monitoring the effect of initiating the Joint Commission Universal Protocol demonstrates that there is still an increase (not a decrease) in the number of reported cases for wrong site surgery in the United States. This may simply be a reflection of improved reporting, but the fact remains that the incidence and frequency of this problem has not decreased since the initiation of the Universal Protocol. Further analysis and recommendations oriented towards health-care system organization, overall processes of care in the surgical areas, and better understanding the cultures of health-care providers (and their respective organi-

zations) are warranted. Specific attention is also needed to evaluate the involvement of surgeons and other team members. The problem will require a combination of system organization commitment and modification of individual behaviours to improve the outcomes.

The principles for this Solution should apply to all areas where interventions are performed and, if used, the strategy should be performed uniformly in all procedural areas at all times in order to provide consistency and increased compliance.

▶ SUGGESTED ACTIONS:

The following strategies should be considered by WHO Member States.

1. Establish the performance of correct surgery at the correct body site as a health-care facility safety priority that requires leadership and the active engagement of all frontline practitioners and other health-care workers.
2. Ensure that health-care organizations have in place protocols that:
   - *Provide for verification—at the preprocedure stage—of the intended patient, procedure, site, and, as applicable, any implant or prosthesis.*
   - *Require the individual performing the procedure to unambiguously mark the operative site with the patient's involvement, to correctly identify the intended site of incision or insertion.*
   - *Require the performance of a "time-out"[1] with all involved staff immediately before starting the procedure (and the related anaesthetic). The time-out is to establish agreement on the positioning of the intended patient on the procedure table, procedure, site, and, as applicable, any implant or prosthesis.*

1 - "Time out" is a specifically allocated period where no clinical activity is taking place. During this time, all team members independently verify the impending clinical action.

▶ LOOKING FORWARD:

Member States should consider:

- Monitoring the ongoing frequency and incidence of wrong site procedures as part of voluntary reporting systems.
- Using any incident reports to promote multidisciplinary collaborations to promote systems-based change in all procedure areas.

▶ STRENGTH OF EVIDENCE:

- Analyses from the Joint Commission Sentinel Event database and the American Academy of Orthopaedic Surgeons database.
- Expert consensus.

▶ APPLICABILITY:

- Hospitals, ambulatory care facilities, and office-based surgical facilities.

▶ OPPORTUNITIES FOR PATIENT AND FAMILY INVOLVEMENT:

- Involve patients at all points in the preoperative verification process to reconfirm with the procedure staff their understanding for the planned procedure.
- Involve patients in the surgical site marking process, whenever possible.
- Discuss these issues during the informed consent process and confirm decisions at the time of signature for the consent.

▶ POTENTIAL BARRIERS:

- Lack of surgeon "agreement" to the standardized approach and difficulty to change the culture.
- Failure to recognize risks in procedural settings other than the operating room.
- Reluctance of nurses and other staff to question the surgeon when a possible error is identified.
- Inadequate human resources and knowledge for facilitating processes to be challenged.
- "Automatic" behavior during the time-out process ("going through the motions" but without meaningful communication).
- Insufficient generally accepted research, data, and economic rationale regarding cost-benefit analysis or return on investment (ROI) for implementing these recommendations.

▶ RISKS FOR UNINTENDED CONSEQUENCES:

- Inconsistent interpretation of an "X" marking to "operate here" versus "do not operate here".
- Inconsistency of Universal Protocol procedures among several hospitals within a geographic area, staffed

by the same surgeons operating at more than one of the hospitals.

- Permanent tattooing of immature skin (premature infants).
- Perception of increased workload by staff and decreased efficiencies.

EXAMPLE OF
Performance of Correct Procedure at Correct Body Site

Policy

Organization policy describes standardized approach to ensure that correct procedures are consistently performed on correct patients.

Practitioner

Correct Diagnosis & Procedure Planning

Conduct informed consent process:
- Inform patient and family about procedure rationale, plans, options, risks.
- Obtain and document consent for all procedures, including full name of procedure, site, anaesthesia plan or preferences.

Provider

Day of Procedure

Pre-Procedure Verification:
- Ensure practitioners have current information on the patient's medical status and proposed procedure plans - obtain the patient record.
- Verify all relevant entries, including the informed consent document, are present and properly identified for the correct patient.
- Obtain relevant laboratory tests and imaging studies and verify correct patient identification on images.

Practitioner

Patients

Pre-Op Holding Area

Mark The Procedure Site:
- Marked by person who will do the procedure.
- Use indelible marker.
- Mark the practitioner's initials.
- Have patient confirm site and markings.

Practitioner

Operating/ Procedure Room

Conduct "Time-Out":
- Verify correct patient (2 IDs).
- Verify planned procedure.
- Verify procedure site.
- Verify correct positioning on procedure table.
- Verify availability of special equipment, implants, or prosthesis.

Proceed with Correct Procedure

Patients

Engage patients and families in all aspects of care. Provide patients with information about their medical condition and proposed procedure plans in a way that is understandable to the patient at all times.

This example is not necessarily appropriate for all health-care settings.

▶ REFERENCES:

1. *Lessons learned: wrong site surgery. Sentinel Event Alert, Issue 6, 28 August 1998. Joint Commission. http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea_6.htm.*
2. *A follow-up review of wrong site surgery. Sentinel Event Alert, Issue 24, 5 December 2001. Joint Commission. http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea_24.htm.*
3. *2003 National Patient Safety Goals. Oakbrook Terrace, IL: Joint Commission, 2003 (http://www.acha.org/info_resources/jcaho2_02.pdf, accessed 12 June 2006).*
4. *Statement on ensuring correct patient, correct site, and correct procedure surgery. Bulletin of the American College of Surgeons, 87:12, December 2002. http://www.facs.org/fellows_info/statements/st-41.html.*
5. *AAOS launches 2003 public service ad campaign. AAOS Bulletin, February 2003. American Academy of Orthopaedic Surgeons' "Sign Your Site" initiative.*
6. *Correct site surgery alert. London: National Patient Safety Agency, 2 March 2005.*

▶ OTHER SELECTED RESOURCES:

1. *National Quality Forum (NQF) Safe Practices for Better Health Care, Link: http://www.qualityforum.org/projects/completed/safe_practices/*
2. *NPSA Alert, Link: http://www.npsa.nhs.uk/site/media/documents/883_CSS%20PSA06%20FINAL.pdf*
3. *The Universal Protocol Tool, Link: http://www.jcipatientsafety.org/show.asp?durki=10815&site=149&return=9334.*