

Universal Protocol: Time-out Procedure

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Universal Protocol

The operating room is a fast paced, stressful, and technologically complex environment making the potential for wrong site surgery a reality. The Joint Commission reports that wrong site surgery may occur as many as 40 times per week ("Wrong-Site Surgery," 2013). Patient safety is at risk when staff members do not follow the policy and guidelines of the Universal Protocol or "time-out." Universal Protocol, or time-out, is a pause by all team members to be involved in the verification of correct patient identification, surgical site, and procedure to be performed.

It has been well documented that the best practice to prevent wrong-patient, wrong-site, or wrong-surgery is the implementation and utilization of a surgical site checklist (Spruce, 2014). This checklist has been shown to reduce errors, improve communication and collaboration, strengthen teamwork, and improve patient safety. The use of a standardized checklist ensures that key components to safe patient care will not be forgotten or missed (Collins, Newhouse, Porter, & Talsma, 2014). Items included on the checklist include, but are not limited to, the use of two patient identifiers; verification of allergies; surgical site including laterality with site marking, if applicable; procedure; antibiotic ordered and time given; possible anesthesia complications or concerns such as a difficult airway; estimated blood loss and availability of blood; correct equipment, implants, or radiographic images; and a time for anyone on the team to speak up and voice concerns (Chard, Guglielmi, Gawande, & The Joint Commission, 2013). Even with the evidence and requirements, some staff and physicians do not see the benefit of using the checklist or taking a time-out before beginning surgery.

If we truly want to promote safe patient care, the adoption of and adherence to checklists could help prevent human error in fast paced, technologically complex environments

(Collins et al., 2014). The Agency for Healthcare Research and Quality (AHRQ, 2014) points out that a pilot must follow the same pre-flight checklist in preparation for flight every time, no matter how many times they have carried out the tasks. They report that “by standardizing the list of steps to be followed, and formalizing the expectation that every step will be followed for every patient, checklists have the potential to greatly reduce errors due to slips” (AHRQ, 2014, para. 2).

The issue of noncompliance puts patients at risk and undermines teamwork. Real and perceived barriers should be determined and addressed. Real barriers are surgeon intimidation, accountability, resistance, lack of acceptance and commitment by surgeons and staff, and organizational culture. Perceived barriers are time pressure and perceived lack of value (Clark, 2012).

Data Analysis

In order to ensure patient safety, the time-out protocol needs to be implemented each time a surgery is to take place. Collins et al. (2014) estimate “approximately 2,700 patients are harmed by wrong-site surgery each year” (p. 65). Researchers Haugen, Muruges, Haaverstad, Eide, and Søfteland (2013) conducted a study to determine surgical team members’ perceptions of near mistakes and their overall attitudes towards the time-out protocol. Surgeons, anesthesiologists, nurse anesthetists, and operating room (OR) nurses were all surveyed. As a result, “38% had experienced uncertainty of patient identity, 81% had experienced uncertainty of the surgical site or side, and 60% had prepared for the wrong procedure” (Haugen et al., 2013, para. 3). Additionally, only 63% “agreed that verifying that correct patient, site, and procedure should be a team responsibility” (Haugen et al., 2013, para. 3). In addition to patient safety, researchers with the Department of Health and Human Services Agency for Healthcare Research

and Quality estimated the cost of managing preventable errors among surgery patients to be \$1.5 billion each year (as cited in Watson, 2009).

While the Universal Protocol may not prevent every human error, the time-out protocol, in addition to an organizational safety culture that works together to promote patient safety, should be implemented in all health care facilities in order to minimize human error as much as possible (Collins et al., 2014). The protocol is only as good as the individuals implementing it. In order for it to be effective, surgical team members must be in agreement of its importance.

Plan for Change

In order to instill lasting change, the entire organizational safety culture must agree about the importance of following the Universal Protocol. In addition, each member of the surgical team must take responsibility for participating in the Universal Protocol and be a part of verifying the patient, site, and procedure. In order to accomplish this, clear communication must be emphasized, and the organizational attitude towards safety should be regularly assessed and encouraged (Haugen et al., 2013). Flawed teamwork contributes to errors in healthcare more so than a lack of clinical skill (Wæhle, Haugen, Søfteland, & Hjälmhult, 2012).

In order to improve team involvement, the most effective strategy to be employed is that of “engaging social and professional team involvement” (Wæhle et al., 2012, p. 4). Foundational to team involvement is mutual respect for each individual on the surgical team. There will be one coordinating nurse who is responsible for initiating and coordinating the time-out protocol. The team members, out of respect for the process, must all stop what they are doing and participate in the time-out in order to ensure patient safety. This foundational teamwork must begin by an agreement among all members of the surgical team of the effectiveness of the time-out protocol (Wæhle et al., 2012). In an effort to improve the safety culture, the OR

management should meet with the entire surgical team to discuss the importance of minimizing the hierarchy within the surgical team while working to empower nursing staff (Wæhle et al., 2012). Additionally, the OR management must emphasize and expect clear communication, team involvement, and mutual respect of the surgical team with the goal of patient safety being of the utmost importance (Wæhle et al., 2012).

This plan for change can begin with a meeting among the OR management. Once the OR management is in agreement, they can then meet with the entire surgical team to explain the importance of the proposed changes. In this meeting, the surgical team will be allowed to raise concerns within the group or privately with the OR management. Once the concerns are addressed, the management can assign an individual to assist the surgical team in carrying out the time-out protocol. Team involvement and mutual respect among all team members must be emphasized. After this process is in place, the OR management can plan for a person to observe the surgical team unannounced at defined intervals to ensure compliance and identify problems that need to be addressed. If at any point the individual observing finds the surgical team is communicating poorly, being disrespectful, or some individuals are noncompliant with the time-out protocol, these individuals can be addressed on an individual basis by the OR management.

Supporters and Opponents

Those who support the use of a surgical checklist and time-out protocol promote patient safety (Collins, et al., 2014). All members of the surgical team must work together to ensure that this patient safety measure is in place (Dillon, 2008). However, because nurses and surgeons perceive the level of teamwork differently, the use of the surgical checklist and time-out are affected (Carney, West, Neily, Mills, & Baglan, 2010). The perioperative nurse serves primarily as an advocate for the patient and runs the surgical time-out protocol. Carney et al. (2010) report

that nurses perceive teamwork and communication less favorably than surgeons. As a result, nurses may not feel as empowered to speak up during the time-out in the event of an unsafe situation. This disparity of communication perception between nurses and surgeons leads to the potentially poor patient outcomes (Carney et al., 2010).

One way to improve the communication between nurses and surgeons would be to host more training and continual education events that are open and relevant to all members of the surgical team. If the different members of the surgical team have more training in common, they may have a more similar image of how to improve patient safety. Also, providing nurses and surgeons more opportunities to interact outside of the operating room may improve their communication on a personal level.

Another barrier to consistent use of the time-out protocol includes the perception by members of the surgical team that it is not an effective practice (Fourcade, Blache, Grenier, Bourgain, & Minvielle, 2012). Due to increasing costs, workload, and time constraints, some healthcare professionals have adopted the attitude that the surgical time-out protocol is a waste of time (Fourcade et al., 2012). Although a majority of teams utilized a surgical checklist despite this attitude (90.2%), the average completion was only 61% (Fourcade, et al., 2012). This suggests that though surgical teams are participating in this protocol, the level of dedication to it is less than ideal.

This attitude is also seen in the practice of certain “unacceptable time-outs” that are either incomplete or incorrect (Dillon, 2008). These unsafe practices include borderline and related time-outs, where some information is incomplete. There are also cases of contrary or invented time-outs, which do not include patient identifying information (Dillon, 2008). The cultural

acceptance of unsafe practices does not stem from a lack of education, but rather from a poor attitude towards seemingly ineffective or redundant safety requirements.

To combat a negative attitude towards time-out protocol in the operating room, hospital administrators could try to provide more time for surgical procedures. One of the reasons cited for a lack of complete protocol was a sense of being rushed and overworked (Fourcade, et al., 2012). There is no excuse for unsafe practices just to improve efficiency in the operating room. Further, promoting a culture of safety where healthcare professionals were valued and rewarded for safe practices could improve the attitude of the surgical team in the completion of the time-out protocol.

Change Theories and Time-Out Procedures

The process for change developed by Eric Havelock is an excellent road map to transition a surgery department to use a time-out procedure. The process described by Havelock begins with building a relationship, then diagnosing the problem. The next steps would include acquiring the proper resources, choosing the solution, then gaining acceptance by all parties involved. The last stage includes stabilization and self-renewal. All parts of the theory must be included for change to occur (Sullivan, 2013).

To begin the change process laid out by Havelock, one must develop relationships with the members of the surgery department, including the management, surgeons and all staff involved. As mentioned previously, communication is key as well as providing background research regarding how the time-out initiative can decrease surgical errors and have a positive impact on patient safety. This will also cover the second stage of diagnosing the problem. It is imperative to analyze the data on surgical errors to get buy-in from those who do not see the time-out as important. Next, acquiring the proper resources is paramount to prepare for implementing changes and to ensure smooth and consistent time-out procedures. Pre-surgery

checklists need to be developed with approval from all levels of the surgery team to make sure everyone understands the importance of participation during the time-out (Haugen et al., 2013).

Choosing the “solution” or proper time out plan and protocol would be the next step.

This part can be initiated by management and discussed on all levels necessary to promote the process and buy-in of the time out procedures. Nurses in the operating room (OR) setting will be key in recording the time-out and ensuring consistent compliances once the protocol is a consistent part of the OR process. This goes along with gaining acceptance by all parties involved. Once all team members accept the time-out process and checklist, the final stage of stabilization and self-renewal can lead to the final acceptance and implementation of the change process. This stage shows that the newly implemented strategy is accepted by all team members and has been accepted as enlisted as part of the organizational culture of safety. Change is always challenging, but with proper planning, implementation, and by getting all surgery team members on board with the checklist and time-out protocols, the results for improvement of patient safety will be evident (Haugen et al., 2013).

Anticipated Resistance

For healthcare providers, changing one’s practice takes a lot of time and effort.

Resistance to the change can come from nursing and hospital leadership, physicians, nurses and others in the surgical team. Comments from critics of the Universal Protocol and the checklist include that it expends resources for training of staff, is time-consuming, reduces operating room efficiency and may increase patient anxiety (Ranganathan & Gogtay, 2015). Successful implementation should include a multidisciplinary team approach, active staff and patient participation, supportive leadership and active communication promoting a healthy work environment (Conrardy, Brenek & Myers, 2010).

If resistance to participate continues, policies and procedures should be developed for failure to comply. For example, a verbal counseling will be offered for the first offense, then a written citation or termination for the second. Banning a team member from the operating room until they agreed to participate could also be a consequence implemented. If a nurse encounters resistance from the physician, for example, the chief of surgery will be called upon. Monitoring can minimize resistance and an evaluation plan will help monitor improvement. Through education, training and communication, staff will have a better understanding of the success of the Universal Protocol, which will result in a smooth transition.

Measurable Outcomes

To ensure that the “time out” is working and decreasing the occurrence of wrong-site, wrong-procedure and wrong-person surgery, measurable outcomes need to be set in to place.

The Universal Protocol is designed to ensure that all personnel focus on the patient just before the beginning of surgery to ensure that everyone agrees that they are performing the right procedure on the right patient on the right side of the patient’s body (Saufi, 2005). To ensure the time-out protocol reduces the incidence of wrong procedures, a special team should be put in place to compare the amount of surgery errors from year to year. They should also be compared with OR teams that do not follow this Universal Protocol to see who has fewer mistakes. By doing this it would allow a review of data to measure the improvements implemented by a change in protocol.

Stabilizing the Change

To make sure that this change stays and is followed correctly, the OR management needs to make sure the entire surgical team is educated and informed about the process. Meetings should take place frequently and management needs to be available to answer questions that

anyone may have about the implemented change. Management should help the surgical team get started and be with them during the first couple times they follow the Universal Protocol. This would allow them to ensure that it is being done correctly and management would also be there if there is confusion until the team feels comfortable. Once the surgical team is comfortable with the change, management should check back frequently to make sure everything is still running smoothly.

Role of Leadership

The implementation of this process will begin with clinical leaders including nurse managers, staff educators, and quality control managers. To initiate the change, managers will first inform their staff about the new process through memos and staff meetings to discuss relevant issues (Sullivan, 2013). Then, staff educators will provide training on adherence to the time-out process. Managers will also need to be aware of potential resistance to these changes and provide rewards for those employees who demonstrate the desired behaviors throughout the change process (Sullivan, 2013). For instance, when certain staff members resist the time-out process because they find it to be a waste of time, nurse managers should meet with those staff members individually to explain to them the importance of the change (Fourcade et al., 2012).

Managers will also need to identify key clinical staff members involved in direct patient care to act as change agents. These key staff will help the manager to ensure that the changes are implemented and that measurable outcomes are accurately evaluated (Sullivan, 2013). Key staff may include circulating RNs, techs, or physicians who have received additional training and have agreed to serve in the role. This transition period may be difficult for the OR staff to manage, so managers and key staff will need to provide additional support to assist throughout the process.

Conclusion

The information presented in this paper provides an in- depth discussion on the benefits of implementing and utilizing a Universal Protocol or time out procedure to prevent wrong site surgical errors. As mentioned previously, although the health care industry has had some resistance to utilizing and initiating time-out procedures, it improves patient safety during surgery. Time and statistics will be able to track if the effort put toward utilizing time out procedures will save lives and improve patient safety. Perhaps in the future, using the Universal Protocol will never have resistance or doubts because it was proven to be a worthwhile life saving endeavor.

References

- Agency for Healthcare Research and Quality (2014). Patient safety primers. *AHRQ*. Retrieved from <http://psnet.ahrq.gov/primer.aspx?primerID=14>
- Carney, B., West, P., Neily, J., Mills, P., & Bagian, J. (2010). Differences in nurse and surgeon perceptions of teamwork: implications for use of a briefing checklist in the OR. *AORN Journal*, *91*(6), 722-729. doi:10.1016/j.aorn.2009.11.066
- Chard, R., Guglielmi, C., Gawande, A., & The Joint Commission (2013). Comprehensive surgical checklist. *Association of periOperative Registered Nurses*. Retrieved from https://www.aorn.org/Clinical_Practice/ToolKits/Correct_Site_Surgery_Tool_Kit/Comprehensive_checklist.aspx
- Clark, J. R. (2012). What keeps facilities from implementing best practices to prevent wrong site surgery? Barriers and strategies for overcoming them. *Patient Safety Authority*. Retrieved from http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2012/nov20_9%28suppl%201%29/Pages/01.aspx
- Collins, S. J., Newhouse, R., Porter, J., & Talsma, A. (2014, July 1). Effectiveness of the surgical safety checklist in correcting errors: a literature review applying Reason's Swiss cheese model. *AORN Journal*, *100*(1), 65-79. <http://dx.doi.org/10.1016/j.aorn.2013.07.024>
- Conrardy, J., Brenek, B., & Myers, S. (2010). Determining the state of knowledge for implementing the universal protocol recommendations: an integrative review of the literature. *AORN Journal*, *92*(2), 194-207. doi:10.1016/j.aorn.2009.12.031
- Dillon, K. (2008). Time out: an analysis. *AORN Journal*, *88*(3), 437. doi:10.1016/j.aorn.2008.03.003

- Fourcade, A., Blache, J., Grenier, C., Bourgain, J., & Minvielle, E. (2012). Barriers to staff adoption of a surgical safety checklist. *BMJ Quality & Safety, 21*(3), 191-197.
doi:10.1136/bmjqs-2011-000094
- Haugen, A. S., Muruges, S., Haaverstad, R., Eide, G. E., & Søfteland, E. (2013). A survey of surgical team members' perceptions of near misses and attitudes towards time out protocols. *BMC Surgery, 13*, 46. doi:10.1186/1471-2482-13-46
- Ranganathan, P., & Gogtay, N. J. (2015). Improving peri-operative patient care: The surgical safety checklist. *Journal Of Postgraduate Medicine, 61*(2), 73-74. doi:10.4103/0022-3859.153101
- Saufl, N. (2005). Universal protocol for preventing wrong site, wrong procedure, wrong person surgery. *Journal of PeriAnesthesia Nursing, 19*(5), 348-351.
- Spruce, L. (2014). Back to basics: Implementing the surgical checklist [Journal article]. *AORN Journal, 100*(5), 466-476. <http://dx.doi.org/http://dx.doi.org/10.1016/j.aorn.2014.06.020>
- Sullivan, E. (2013). *Effective leadership and management in nursing* (8th ed.). Saddle River, NJ. Pearson.
- Wæhle, H. V., Haugen, A. S., Søfteland, E., & Hjälmhult, E. (2012). Adjusting team involvement: a grounded theory study of challenges in utilizing a surgical safety checklist as experienced by nurses in the operating room. *BMC Nursing, 11*(1), 1-10.
doi:10.1186/1472-6955-11-16
- Watson, D. (2009). Implementing the universal protocol. *AORN Journal, 90*(2), 283-287.
doi:10.1016/j.aorn.2009.07.019
- Wrong-Site surgery cited as top OR safety challenge among U.S. hospitals, survey finds [Magazine]. (2013, August 1). *Infection Control Today*. Retrieved from

<http://www.infectioncontrolday.com/news/2013/08/wrong-site-surgery-cited-as-top-or-safety-challenge-among-us-hospitals-survey-finds.aspx>

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Grading Criteria	%	Comments	Points
Identify a TJC safety goal that is relevant to an area of concern at your place of employment or clinical rotations. Describe a situation that needs change. Identify data related to the problem to be collected.	15		<u>15</u>
Develop a plan for data analysis and plan for change, including time frame and resources.	15		<u>15</u>
Identify potential supporters and opposers and strategies to build a coalition of supporters.	10		<u>10</u>
Using an appropriate change model or theory, describe how this model or theory could be used to prepare for change and to implement the change process.	10		<u>10</u>
Describe anticipated resistance to the proposed change and strategies to manage resistance.	10		<u>10</u>
Describe feedback mechanisms and the evaluation process including measurable outcomes.	10		<u>10</u>
Discuss a brief plan for stabilizing the change.	5		<u>5</u>
Briefly describe leadership's role in this PI process. Identify key players who would be beneficial for success.	5		<u>5</u>
Correct grammar, essay writing, spelling and punctuation.	10	<u>Minor errors</u>	<u>8</u>
Correct use of APA format including adherence to page limit (10 pages). Include minimum 4 textbook or journal articles as references. Include a copy of the rubric and honor code. Submit through SafeAssign.	10		<u>10</u>
Final Grade	100	<u>Very nicely done – good teamwork!</u>	<u>98</u>