

# Patient Safety Tip of the Week

## May 2, 2017 Anatomy of a Wrong Procedure

Our May 2017 What's New in the Patient Safety World column "[Another Success for the Safe Surgery Checklist](#)" discusses the utility of the Safe Surgery Checklist (also known as the Surgical Safety Checklist) in improving patient outcomes. It stresses the importance of not just the checklist but also active engagement of and buy-in by staff in roll out and adoption of the checklist.

Today's column illustrates how having such a checklist without an appropriate culture of safety can lead to adverse patient outcomes.

In its most recent batch of statements of deficiencies (SOD's) and plans of correction (POC's) regarding incidents in California hospitals the California Department of Public Health (CDPH) included a case in which a patient's ovaries were incorrectly removed during a surgical procedure ([CDPH 2017](#)). A patient with symptomatic uterine leiomyomata was intended to have a total laparoscopic hysterectomy with bilateral salpingectomy and incidental appendectomy. Intent was to preserve her ovaries. However, the ovaries mistakenly removed during surgery.

The surgical booking form listed as the procedure "TCH (total complete hysterectomy), BSO (bilateral salpingo oophorectomy), appy (appendectomy) ... " and the roster of surgical cases scheduled for that day indicated for this patient "Procedure: laparoscopic hysterectomy, BSO (bilateral salpingo oophorectomy, appendectomy)".

But the consent indicated the (handwritten) procedure: "Laparoscopic hysterectomy-removal of both fallopian tubes –appendectomy" and the preop H&P signed by the surgeon indicated under "Plan" "A total laparoscopic hysterectomy with bilateral salpingectomy is planned. We will save the ovaries and incidental appendectomy will be performed."

The surgeon led the surgical timeout and no one noted the disparity between the booking form and surgical case roster vs. the H&P and consent. The surgery was performed and both ovaries were mistakenly removed. The following day the patient apparently informed the surgeon that she was not supposed to remove her ovaries. The surgeon admitted she had made a mistake and removed the ovaries.

Root cause analysis revealed numerous contributing factors/root causes. One contributing factor for wrong patient/site/side/procedure incidents is **surgical scheduling or booking**. In our October 30, 2012 Patient Safety Tip of the Week "[Surgical Scheduling Errors](#)" we discussed how errors made during booking or scheduling are commonly made. But we

noted that the vast majority of such errors never reach the patient because they are intercepted during several opportunities before the surgery actually takes place. In this case those several opportunities failed to intercept the error. In addition to the faulty immediate surgical (verification) timeout in the OR, there were opportunities to identify the error when the patient was admitted and when the patient was transferred to the preprocedure area. Also missing from the CDPH documents is any mention of a presurgical huddle/briefing. The presurgical huddle is an excellent opportunity for the surgeon, anesthesiologist, and OR nurse to get together and not only confirm what is to be done but also discuss any special needs for the procedure and plan for possible contingencies (see the list of our prior columns on briefings and debriefings below). For example, we feel that one topic to be discussed during the preop briefing is what surgical specimens are expected to be sent to the pathology lab. Had that been discussed here it probably would have been recognized that the ovaries were not to be removed.

The facility apparently did utilize the [WHO Surgical Safety Checklist](#) but, as we noted above, there were several features in the **local culture** that rendered that checklist inadequate. One nurse stated "My signature was for the patient identification only, the doctor MD led the time out..". Another nurse stated: "My signature only means I was part of identifying the correct patient and date of birth, not the right procedure". Neither nurse saw the consent or the H&P or other portions of the medical record. Hospital policy required the timeout to be led by the circulating nurse, not the physician. Yet both nurses and the Director of Quality Services indicated this physician leads her own timeout. The physician said "...she is not perfect and she forgot the correct procedure ... " yet did not seem to acknowledge that use of a checklist is to help avoid forgetting such items. And it is not clear from the CDPH document whether the facility was auditing compliance with the timeout/verification process and the checklist before this event took place. Even regarding the surgical scheduling, the response was "That was just a request for a time slot from the doctor's office ... " rather than acknowledging the importance of scheduling in avoiding wrong patient/site/laterality/procedure. The old saw "**culture trumps policy every time**" was clearly in effect here.

This case reaffirms the problems associated with surgical scheduling/booking. For details about all aspects of surgical scheduling that impact patient safety see our October 30, 2012 Patient Safety Tip of the Week "[Surgical Scheduling Errors](#)". Another point not elaborated upon in the CDPH document is use of the abbreviation "BSO" for bilateral salpingo-oophorectomy. We've cautioned that in scheduling forms and documents you should avoid both abbreviations and acronyms. The full name of the procedure should be written out and abbreviations avoided. In particular, use of "R" or "L" or "B" for laterality should be avoided. Sometimes an "R" gets misinterpreted as a "B" or vice versa when indicating laterality of the procedure. We would also wonder here whether the person calling from the physician office simply called in "BSO" out of habit when only a bilateral salpingectomy was intended (without the oophorectomy). Often it is a non-clinical person calling in the case from the office or clinic and just as often (as appears to have happened in this particular case) a non-clinical person is receiving the request at the facility and entering it into the schedule.

The case also clearly illustrates the importance of having **primary source documents** available in the OR. During the verification process all parties need to make sure that the procedure and laterality are corroborated in the H&P and consent.

One critical issue is the availability of the H&P at the time of surgery. Particularly since most patients having elective surgery are admitted on the day of surgery or are having same day surgery, the H&P must be available in advance. We've seen cases where the surgeon dictates the H&P on the day of admission and a readable copy may not be available for all the OR players to read. Therefore, it is imperative that your OR require the H&P from the surgeon's office be available prior to the day of surgery (and remember it must be appropriately updated when it is done in advance). Having a "surgical home" is a good way to ensure this, whether the "surgical home" is staffed by surgeons, anesthesiologists, or preferably a multidisciplinary group. The other way, as described in our October 30, 2012 Patient Safety Tip of the Week "[Surgical Scheduling Errors](#)" is to cancel any elective cases for which a copy of both the informed consent and the H&P are not available at least a couple days in advance of the scheduled procedure.

It is extremely common in academic settings and even in community or rural hospitals for surgeons to obtain the informed consent in the preoperative area. Our June 5, 2007 Patient Safety Tip of the Week "[Patient Safety in Ambulatory Surgery](#)" noted that ambulatory surgery is particularly vulnerable to missing documents because those documents are usually in the surgeon's office rather than at the hospital. That is why you need to be firm in your requirement for such documents before cases are scheduled. And, yes, we still continue to encounter some surgeons who look at the document as some sort of regulatory requirement foisted upon them! We hope you'll also go back to our September 10, 2013 Patient Safety Tip of the Week "[Informed Consent and Wrong-Site Surgery](#)" to see problems associated with informed consent.

And don't forget about imaging studies. We have recommended that copies of relevant imaging **reports** also be available. While copies of actual images are often present in the OR, many of the personnel who need to participate in site/side verification may not be familiar with interpretation of such images. Therefore, they should look at the imaging reports to verify site/side.

There was also deviation in this case from the facility policy that the circulating nurse lead the timeout. We also like the "Minnesota Timeout" concept in which someone other than the surgeon leads the time out process. That helps prevent team members from simply agreeing with the surgeon. The timeout is supposed to be an **active** rather than passive process and there should not be undue deference to the surgeon. Every member of the team needs to speak up and not be afraid to challenge any aspect.

There are several topics we hope the facility addressed in its own RCA that are not mentioned in the CDPH document. An obvious one is whether there were any time pressures that may have contributed to shortcuts taken. Did this surgeon/team have multiple cases scheduled that day, particularly cases that may have been similar and actually included removal of ovaries.

One issue we usually ask early in an RCA of an adverse event is whether indications for surgery were appropriate. For example, in this case we'd ask not only whether the hysterectomy was clinically indicated but also whether the incidental appendectomy was indicated. "Incidental" appendectomy has been a controversial topic for many years. There are some guidelines, albeit based on lower grades of evidence, regarding incidental appendectomy in gynecologic procedures ([ACOG 2016](#), [Tam 2013](#)).

Though a site marking may not be indicated in patients having bilateral procedures, don't forget that involving the patient in the sort of preop setting where a site marking would ordinarily be performed is also another opportunity to verify with the patient the procedure to be performed. So there should be a "site marking ceremony" even when no site marking is indicated.

The POC (plan of correction) from the facility reeducated all relevant staff regarding use of the signed consent form and H&P to correctly verify the patient, surgical procedure, and site/side/level. It acknowledged the fallibility of using scheduling documents for the purposes of verification of patient/procedure/site/laterality and indicated the schedule should not be used for verification. We're not so sure we'd dismiss the schedule outright. Having a clinical person do the scheduling and review the required documentation (consent, H&P) provides one more opportunity to flag a possible mistake.

The facility's POC also reiterated that their policy precludes the timeout being led by the surgeon.

The attending surgeon and the facility's Risk and Patient Safety Manager met with affected patient promptly following surgical event and agreements were reached with the patient regarding appropriate clinical monitoring and provision of appropriate medication therapy.

As part of the POC a checklist/tracer tool was developed, implemented and revised to audit correct use of the checklist and verification process. We'll also add our commentary here that simply auditing a checklist is not enough. We've seen too many times all items checked on such checklists even if they have not been done. Therefore, we recommend any audit for compliance include some form of random observation of the timeouts (by either direct observation or review of video monitoring of procedures). You will be surprised at how many hospitals have implemented the Safe Surgery Checklist (or equivalent) and assumed it was being used properly, only to find out compliance was poor when they have an adverse event.

Yes, errors during surgery booking/scheduling contributed to the incorrect procedure in this case but the real root causes were likely more related to issues related to culture and imperfect adoption of the surgical safety checklist. This is a good reminder that faulty adoption of a safe surgical checklist without ensuring an appropriate culture of safety is in place may lead to a false sense of security.

**Some of our prior columns related to wrong-site surgery:**

September 23, 2008	<a href="#">“Checklists and Wrong Site Surgery”</a>
June 5, 2007	<a href="#">“Patient Safety in Ambulatory Surgery”</a>
July 2007	<a href="#">“Pennsylvania PSA: Preventing Wrong-Site Surgery”</a>
March 11, 2008	<a href="#">“Lessons from Ophthalmology”</a>
July 1, 2008	<a href="#">“WHO’s New Surgical Safety Checklist”</a>
January 20, 2009	<a href="#">“The WHO Surgical Safety Checklist Delivers the Outcomes”</a>
September 14, 2010	<a href="#">“Wrong-Site Craniotomy: Lessons Learned”</a>
November 25, 2008	<a href="#">“Wrong-Site Neurosurgery”</a>
January 19, 2010	<a href="#">“Timeouts and Safe Surgery”</a>
June 8, 2010	<a href="#">“Surgical Safety Checklist for Cataract Surgery”</a>
December 6, 2010	<a href="#">“More Tips to Prevent Wrong-Site Surgery”</a>
June 6, 2011	<a href="#">“Timeouts Outside the OR”</a>
August 2011	<a href="#">“New Wrong-Site Surgery Resources”</a>
December 2011	<a href="#">“Novel Technique to Prevent Wrong Level Spine Surgery”</a>
October 30, 2012	<a href="#">“Surgical Scheduling Errors”</a>
January 2013	<a href="#">“How Frequent are Surgical Never Events?”</a>
January 1, 2013	<a href="#">“Don’t Throw Away Those View Boxes Yet”</a>
August 27, 2013	<a href="#">“Lessons on Wrong-Site Surgery”</a>
September 10, 2013	<a href="#">“Informed Consent and Wrong-Site Surgery”</a>
July 2014	<a href="#">“Wrong-Sided Thoracenteses”</a>
May 17, 2016	<a href="#">“Patient Safety Issues in Cataract Surgery”</a>
July 19, 2016	<a href="#">“Infants and Wrong Site Surgery”</a>
September 13, 2016	<a href="#">“Vanderbilt’s Electronic Procedural Timeout”</a>
May 2017	<a href="#">“Another Success for the Safe Surgery Checklist”</a>

**See our prior columns on huddles, briefings, and debriefings:**

- April 9, 2007 [“Make Your Surgical Timeouts More Useful”](#)
- May 22, 2007 [“More on TeamSTEPPS™”](#)
- December 9, 2008 [“Huddles in Healthcare”](#)
- March 10, 2009 [“Prolonged Surgical Duration and Time Awareness”](#)
- January 11, 2011 [“NPSA \(UK\) ‘How to Guide’: Five Steps to Safer Surgery”](#)
- March 2009 [“Surgical Team Training”](#)
- April 2012 [“Operating Room Briefings and Debriefings”](#)
- July 31, 2012 [“Surgical Case Duration and Miscommunications”](#)
- January 2014 [“A Tool to Assess Pre-op Briefings”](#)
- July 22, 2014 [“More on Operating Room Briefings and Debriefings”](#)
- March 17, 2015 [“Distractions in the OR”](#)

**References:**

CDPH (California Department of Public Health). Complaint Intake Number:  
CA00477434

[http://www.cdph.ca.gov/certlic/facilities/Documents/2567\\_SequoiaHospital\\_IJAP\\_SanMateo.pdf](http://www.cdph.ca.gov/certlic/facilities/Documents/2567_SequoiaHospital_IJAP_SanMateo.pdf)

WHO Surgical Safety Checklist

[http://www.who.int/entity/patientsafety/safesurgery/tools\\_resources/SSSL\\_Checklist\\_finalJun08.pdf](http://www.who.int/entity/patientsafety/safesurgery/tools_resources/SSSL_Checklist_finalJun08.pdf)

ACOG (American College of Obstetricians and Gynecologists). Committee Opinion Number 323. Elective Coincidental Appendectomy. November 2005 (reaffirmed in 2016).

<http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Gynecologic-Practice/Elective-Coincidental-Appendectomy>

Tam T, Harkins G. Elective laparoscopic appendectomy in gynecologic surgery: When, why, and how. OBG Manag 2013;25(3): 42-49

<http://www.mdedge.com/obgmanagement/article/65279/surgery/elective-laparoscopic-appendectomy-gynecologic-surgery-when-why>



Healthcare Consulting  
[www.patientsafetysolutions.com](http://www.patientsafetysolutions.com)

<http://www.patientsafetysolutions.com/>

[Home](#)

[Tip of the Week Archive](#)

[What's New in the Patient Safety World Archive](#)