# Overlapping Surgery Verbiage in Informed Consent Documents

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**Objective:** To assess informed consent documents from U.S. institutions for verbiage regarding overlapping surgery.

**Background:** Overlapping surgery remains a controversial practice. Recent guidance from the Senate Finance Committee and American College of Surgeons emphasizes transparency with patients regarding this practice through the informed consent process, but it remains unclear how many institutions adopted their recommendations.

**Methods:** Informed consent documents were collected from a national sample of 104 institutions and assessed for verbiage regarding overlapping surgery and/or attending absence during a surgical case. The verbiage of these forms was further analyzed for inclusion of key terms (e.g., "overlapping surgery," "critical portions"), as well as transparency regarding surgeon absence.

**Results:** Thirty (29%) forms included verbiage regarding overlapping surgery and/or surgeon absence during a case. Most of these 30 utilized the terms "overlapping surgery" or "critical portions" (18 [60%] and 25 [83%], respectively), although only 3 (10%) explicitly stated that portions of the procedure that may be performed in the absence of the attending surgeon. Six forms (20%) specifically stated who may perform the procedure without the attending present, and 3 forms (10%) had patients acknowledge this section of the consent form with an additional signature or initial. Only 2 of the forms (7%) fulfilled all of the criteria set forth by the Senate Finance Committee.

**Conclusions:** Detailed information regarding overlapping surgery is infrequently included in hospitals' procedure informed consent documents. Forms that include this information rarely provide explicit statements of attending presence and trainee participation, raising concerns regarding surgeon-patient transparency.

**Key Words:** concurrent surgery, critical portions, informed consent, overlapping surgery

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Overlapping surgery, in which one attending surgeon is responsible for 2 synchronous procedures, remains controversial since the publication of *The Boston Globe Spotlight* report on this practice in 2015.[1] Since then, several stakeholders have weighed in on this issue, from surgeons—both individually[2] and through guidelines from the American College of Surgeons (ACS)[3] — to patient rights groups and payors. The crux of this issue for patients was a surprise discovery that the surgeon they thought would be performing their operation was actually absent from the operating room, and the follow-on questions of why the attending was absent and who was operating in their place.

In 2016, concern for patient safety and appropriate Medicare billing practices prompted the Senate Finance Committee (SFC) to publish a report on best practices for overlapping and concurrent surgery.[4] This report and the ACS guidelines clarified that "concurrent" surgery, in which the critical portions of 2 procedures are performed simultaneously, is inappropriate, whereas "overlapping" surgery, in which a surgeon is present for the critical portions of both procedures, is permissible following strict guidelines and safety practices. The SFC report also stressed the importance of the informed consent process, emphasizing that patients should be aware of the practice of overlapping surgery if their case might overlap with that of another patient.

The 4 SFC report recommendations for hospitals' preoperative informed consent process[4] were as follows:

- Ensure patients are aware their procedure will be overlapping before the day of surgery.
- Develop consent forms that "clearly indicate that the surgeon has informed the patient his/her surgery will overlap with another surgery and describe what that entails," such that the patient understands "that her/his surgeon will also be performing a surgery on another patient in another operating room, and that during that time, residents or other medical professionals will perform portions of the patient's surgery."
- Adopt consent forms that require patients to explicitly consent to overlapping surgery (e.g., requiring patients to initial next to this section or to fill out an entirely separate consent form specific to overlapping surgery).
- Develop educational materials for patients and family members to better understand overlapping surgery to make a truly informed decision.

The SFC report also contained other institutional recommendations regarding overlapping surgery, such as developing relevant policies, establishing monitoring mechanisms, explicitly defining procedure-specific critical portions, and identifying a backup surgeon before a scheduled case.[4] In a prior analysis of hospitals' policies in 2018, we found that adherence to these recommendations varied, with 86% of the 28 hospitals we examined reporting such a policy, 63% requiring backup surgeon identification, and

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74% requiring surgeon disclosure to the patient that their case would be overlapping.[5] In a separate study, we recently found significant variation in the choice of included text and reading level of surgical informed consent documents nationwide.[6] The purpose of this present study is to examine these previously collected informed consent documents to determine whether institutions embraced the SFC recommendations to disclose and explain overlapping surgery, opening a broader discussion regarding surgeon-patient transparency.

## METHODS

This is a secondary analysis of a database of 104 procedural informed consent documents from a nationally representative sample of high-volume U.S. hospitals. Details of these documents and the selection criteria have been previously published.[6] These consent forms were universal procedure consent forms rather than forms specific to a particular operation. Verbiage regarding overlapping, concurrent surgery, and/or any surgeon absence from the operating room was extracted from this database and reviewed by study personnel, if present, and assessed for compliance with the SFC report published in 2016.[4] Specifically, we assessed whether forms disclosed overlapping surgery, if and how forms explained what overlapping surgery is to patients, and if patients were required to specifically consent to overlapping surgery through separate initial or signature. We chose to include any mention of attending surgeon absence, even if overlapping surgery was not discussed because the SFC specifically called out such vague statements as inadequate for disclosure if overlapping surgery was planned. Our database does not include information regarding whether or not hospitals permit/practice overlapping surgery. This study was approved by the Vanderbilt University Medical Center Institutional Review Board.

## RESULTS

Informed consent documents were obtained from 104 institutions across the country, representative of each geographic region; 40% were academic institutions (n = 42). Of these 104 forms, 30 (29%) contained verbiage specific to overlapping or concurrent surgery or disclosure of the potential of attending absence from the operating room during the procedure. Of these 30, 24 (80%) were academic institutions.

### Transparency Regarding Overlapping Surgery

Based on the SFC report recommendation that hospitals' consent forms "clearly indicate" a procedure would be overlapping with another surgery, we assessed these forms for such verbiage. As noted in Supplemental Table 1 (Supplemental Digital Content Table 1, http://links.lww.com/SLA/F101), 18 of these 30 forms (60%) specifically used the term "overlapping surgery" or described a patient's surgery as to "overlap" with another, whereas one form (3%) used the term "concurrent staffing"; this form later clarified the attending surgeon would be present for all critical procedures (per ACS[3,4] and SFC documentation, this would then be considered overlapping and not concurrent surgery). The remaining 11 (37%) forms discussed the attending surgeon's absence without using the specific terminology of "overlapping" or "concurrent" surgery.

### Explanation of Overlapping Surgery

The SFC report also recommended informed consent documents describe what overlapping surgery entails, so we assessed how and if forms explained which portions may or may not be performed by the attending surgeon, and who may perform them in the case of attending absence. Nineteen forms (63%) explicitly stated the attending's absence might be due to his or her involvement in another surgical case, as recommended by the SFC; the remaining 11 (37%) did not mention a second operation (Supplemental Digital Content Table 1, http://links.lww.com/SLA/F101). Twenty-five (83%) of the forms utilized the terms "critical portions" or "key portions" to describe portions of cases in which the attending surgeon would be present; no forms explicitly defined specific critical portions of the patient's case, although three (10%) listed potential non-critical portions that may be completed in the absence of the attending surgeon (Supplemental Digital Content Table 1, http://links.lww.com/SLA/F101), and one indicated the attending surgeon was responsible for discussing which parts of the procedure were critical.

Eighteen (60%) of the 30 forms identified who would be operating during attending absence; while 12 were nonspecific (eg, "skilled assistants" or "surgical team," Supplemental Digital Content Table 1, http://links.lww.com/SLA/F101), 6 identified a specific role such as resident or fellow. One form required the names of other involved proceduralists to be documented in the consent form, as well as their names and roles to be shared with the patient postoperatively. Fourteen (47%) discussed a backup attending surgeon who would be available while the attending surgeon was absent.

### Explicit Consent to Overlapping Surgery

Three forms (10%) required the patient to initial specifically next to the overlapping surgery section. One of these and 2 forms from another institution required the provider to check a box indicating the overlapping surgery verbiage applied to this patient; one of the latter also required the attending surgeon's signature in this section. The other 25 forms did not specifically acknowledge the patient was aware of and/or understood this section.

Overall, only 2 forms of the 30 (7%) fulfilled all three of the SFC recommendations—stating the patient's case may be overlapping with another case, detailing what this means (i.e., the attending surgeon would be absent to operate on another patient and other members of the team will be performing portions of the case), and had patients sign or initial next to this section on the form.

## DISCUSSION

This study examined informed consent document verbiage about overlapping surgery from institutions nationwide, finding most forms to be vague or nonspecific in this regard. The SFC recommended in 2016 that informed consent forms clearly indicate when a procedure is overlapping and explain to patients what this entails. Of the 30 consent forms that included any verbiage of attending absence or overlapping surgery, 18 (60%) used the term "overlapping surgery," 6 (20%) indicated who would be operating in the setting of attending absence, and 3 (10%) had patients specifically acknowledge their consent to overlapping surgery with an initial or signature. These

results raise concerns about whether overlapping surgery is being adequately communicated to patients.

It is possible that the consent documents without overlapping surgery verbiage (n = 74) were from institutions that do not allow or practice overlapping surgery—this would represent an appropriate absence of this disclosure. Many of the institutions without such verbiage (n = 56, 75.6%) were nonacademic, and the remaining 18 (24.3%) were academic. Conversely, of the institutions with attending absence or overlapping surgery clauses included in their consent forms, the vast majority were academic (n = 24, 80%)—an unsurprising finding as surgical trainees facilitate overlapping surgery, and it is a common practice at academic institutions.[7–9] While some academic institutions themselves forbid overlapping surgery,[5] the absence of any attending absence or overlapping surgery verbiage in the forms from 43% (n =18) of the 42 high-volume academic institutions in our study raise the possibility that at some institutions these practices occur but are undisclosed in the consent form. In an ideal scenario, we would have collected both hospital consent forms and their policies regarding overlapping surgery, an approach we attempted in a prior study[5] but was met with a low response rate, likely due to the ongoing controversy surrounding this issue.

In addition to overlapping surgery verbiage, we chose to analyze the consent documents in our current database for any verbiage related to attending absence for thoroughness. Eleven of these (37%) only disclosed that attending absence may occur during the patient's procedure, but did not specify that this absence could be due to the attending surgeon performing another procedure on another patient. Such verbiage is insufficient disclosure according to the SFC:

> *"The patient consent process should result in the patient understanding… that her/his surgeon will also be performing a surgery on another patient in another operating room, and that during that time, residents or other medical professionals will perform portions of the patient's surgery."*[4]

There are other reasons for attending absence, like taking a break or charting, with which patients may be more comfortable than overlapping surgery,[10] and the onus is on the surgeon and institution to clarify when another operation is taking place. For these 9 academic and 2 nonacademic hospitals that mention only attending absence, it is unclear whether these are institutions that forbid overlapping surgery or are rather examples of inadequate disclosure. While we cannot know from our database, given the suspected widespread nature of overlapping surgery at academic centers in particular, assuming that these 9 and the 18 without any verbiage (n = 27, 64% of academic institutions in our sample) all forbid overlapping surgery strains credibility. At the very least, this should raise a call for further examination of transparency practices.

If we assume that a larger proportion of these institutions practice overlapping surgery, there are some potential reasons their disclosures are vague or absent in our sample. First, the forms we analyzed were general consent documents used across different types of procedures within each institution and may have been left intentionally nonspecific or vague for this reason; some of these institutions may also employ a separate consent document for overlapping surgery. Second, there are disincentives for institutions and individual surgeons to explicitly disclose overlapping surgery—it can be an unappealing prospect that may challenge patient satisfaction, risk patients canceling their case,[11] and expose surgeons to malpractice risk.[12] To date, enforcement of SFC guidelines is uncertain, and institutions may be awaiting clearer signals that more transparency is required. Lastly, current guidance to institutions regarding overlapping surgery has contradictory elements; while the ACS defined "critical portions" as determined by the attending surgeon,[3] the SFC recommended that institutions or departments explicitly define these for all procedures individudally[4] (an admittedly challenging process[13–16] with some early efforts underway[17]), and institutions may not be pursuing further efforts without clear guidance.

The fact remains that overlapping surgery can be a difficult topic for surgeons to discuss and patients to understand. Developing patient educational materials as the SFC recommends and providing clear language in consent documents for surgeons to follow are a good step towards making such conversations more commonplace and normalizing the idea of a "team" approach to surgical patient care. There continues to be room for improvement in these regards.

## CONCLUSIONS

About a quarter of the 104 informed consent documents we analyzed contained disclosures specific to overlapping surgery or attending absence during a surgical case. In these forms, it was often not stated whether the attending would be performing another case and that others would be performing the procedure when the attending was absent. This raises concerns regarding surgeon-patient transparency in the context of overlapping surgery, especially in light of recent guidance from the SFC.

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